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A GUIDE FOR PLANNING FACILITIES FOR HOME ECONOMICS OCCUPATIONAL PREPARATION PROGRAMS. RESEARCH 23.

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Guidelines are presented to encourage logical, systematic and creative facility planning, as well as to designate pertinent information to be incorporated when writing educational specifications for home economics facilities. Part I discusses the purpose, underlying assumptions, and guiding principles utilized in preparing the guide. Part II considers the kinds of teaching and learning activities to be carried on which will determine facility needs. Rating scales to determine educational objectives and the major emphasis of the program, as well as program information forms to assess course content, group size, and mode and level of learning, are included. Part III describes in detail the distinct spaces to be provided to house occupational preparation programs. Forms and checklists are provided to facilitate the detailed planning of lecture/demonstration, seminar, and laboratory areas. Part IV is an annotated bibliography of reference sources which provide additional information on facility planning. (FP)

THE CENTER FOR VOCATIONAL
AND TECHNICAL EDUCATION

THE OHIO STATE UNIVERSITY
980 Kinnear Rd, Columbus Ohio, 43212

RESEARCH 23

A GUIDE FOR PLANNING FACILITIES FOR HOME ECONOMICS OCCUPATIONAL PREPARATION PROGRAMS

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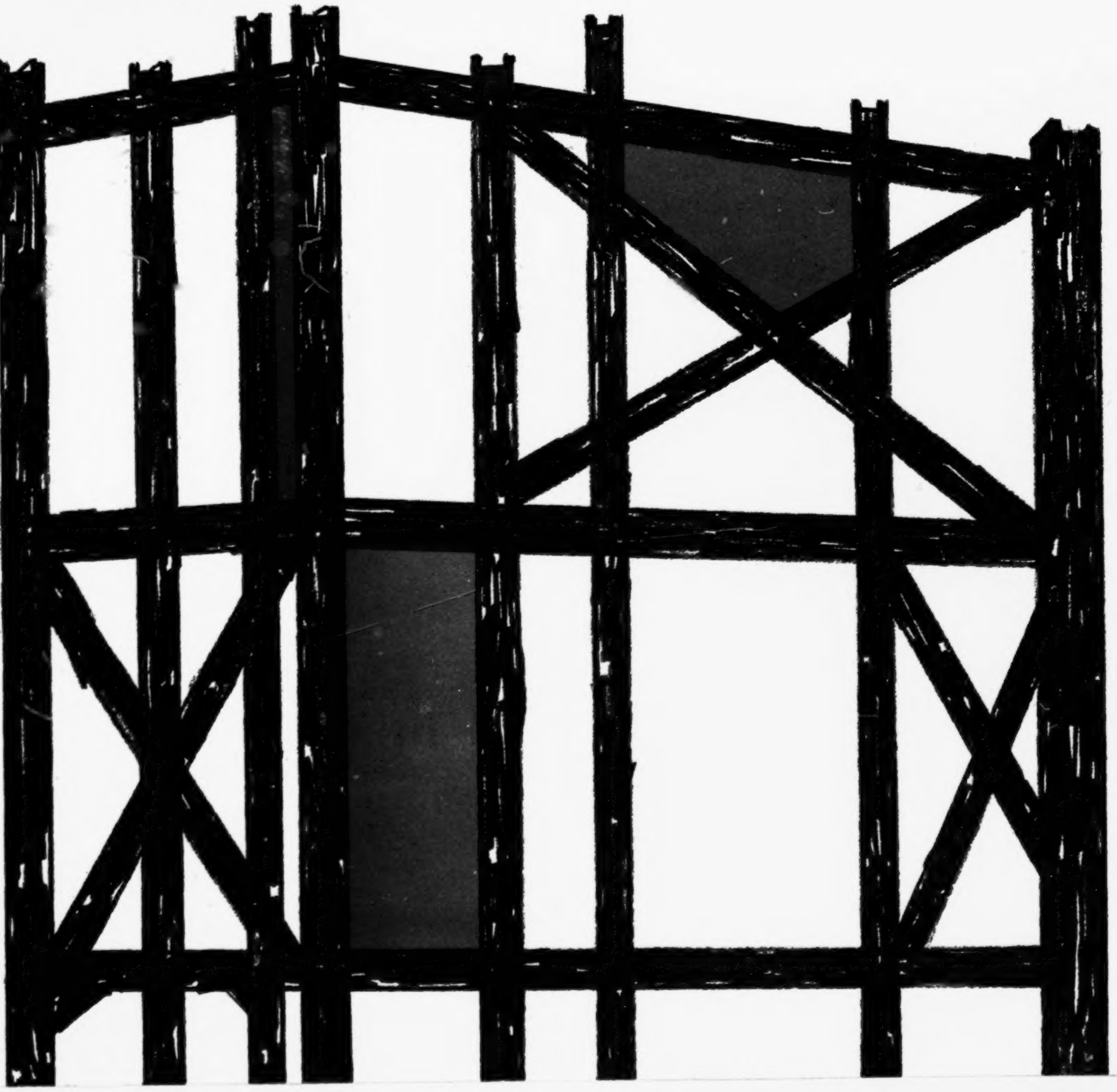

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The major objectives of The Center follow:

1. To provide continuing reappraisal of the role and function of vocational and technical education in our democratic society;
2. To stimulate and strengthen state, regional, and national programs of applied research and development directed toward the solution of pressing problems in vocational and technical education;
3. To encourage the development of research to improve vocational and technical education in institutions of higher education and other appropriate settings;
4. To conduct research studies directed toward the development of new knowledge and new applications of existing knowledge in vocational and technical education;
5. To upgrade vocational education leadership (state supervisors, teacher educators, research specialists, and others) through an advanced study and in-service education program;
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RESEARCH 23

A GUIDE FOR PLANNING FACILITIES FOR HOME ECONOMICS OCCUPATIONAL PREPARATION PROGRAMS

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FOREWORD

One of the most fundamental concerns in planning for vocational and technical education facilities is that of assuring that educational requirements dictate the nature of the facilities. Other concerns include planning a sufficiently adaptable and flexible structure to permit needed modifications and programmatic changes over the lifetime of the building. Experiences have shown that adequate manuals and guide materials can provide substantial assistance in planning educational facilities. This document is a guide for planning facilities for occupational preparation programs in home economics. The information recorded in the guide is to be used in the preparation of educational specifications.

The guide lists a series of pivotal questions about the educational program to be offered. The answers to these program questions bear directly on the numbers and kinds of instructional areas needed in the contemplated facilities. After program decisions are recorded, the guide provides for the description of instructional areas needed to meet program requirements. Much of the material is presented in a checklist format which allows for consideration of alternatives in facility planning.

The guide was designed for use by any person or groups of persons responsible for planning home economics facilities. It is anticipated that knowledgeable persons such as home economics instructors, state supervisors of home economics, university school plant planners, and local administrators will find the guide a useful planning tool.

This guide is the first in a series being developed by The Center. Subsequent guides will be published for animal science technology, automotive trades, business and office occupations, data processing, dental technology, electrical technology, machine trades, medical technology, and metallurgy.

The Center for Vocational and Technical Education and The Administrative and Facilities Unit of the College of Education, The Ohio State University, worked together in developing this planning guide. Center staff project members, Dr. Richard F. Meckley, Ivan E. Valentine, and Zane McCoy, worked cooperatively with Dr. M. J. Conrad of the Administration and Facilities Unit.

Special acknowledgment and appreciation is due Mrs. Lenora Gross, president of The California Home Economics Association, and Dr. Sylvia L. Lee, home economics education specialist, The Center, who helped develop subject area content for the guide. Finally, the project staff is grateful to the many individuals and groups whose assistance and suggestions led to the successful conclusion of the project.

Robert E. Taylor, Director
The Center for Vocational
and Technical Education

CONTENTS

PART I INTRODUCTION

3 Purpose of Guide
3 Organization of Guide
4 Underlying Assumptions
4 Guiding Principles

PART II THE INSTRUCTIONAL PROGRAM

7 Basic Program Features
9 Educational Objectives
12 Program Content Areas
13 Planning Instructional Areas by Modes of Learning
14 Occupational Preparation Programs to be Offered
16 Instructions for Completing Form A
19 Form A--Basic Program Information

PART III DISTINCT TYPES OF INSTRUCTIONAL AREAS TO BE PROVIDED

23 Quantitative Facility Needs
25 Instructions for Completing Form B
27 Form B--Lecture/Demonstration Area Requirements by Content Areas
29 Instructions for Completing Form C
31 Form C--Seminar Area Requirements by Content Areas
33 Instructions for Completing Form D
35 Form D--Laboratory Area Requirements by Content Areas
36 Form E--Summary of Facility Requirements for Home Economics Occupational Preparation Programs
37 Qualitative Facility Needs
38 Form F--Description of Lecture/Demonstration Area(s)
42 Form G--Description of Seminar Area(s)
45 Form H--Description of Care and Guidance of Children Laboratory Area(s)
51 Form I--Description of Foods Laboratory Area(s)
59 Form J--Description of Clothing Laboratory Area(s)
65 Form K--Description of Home Furnishing Laboratory Area(s)
68 Form L--Description of Institutional and Home Management Laboratory Area(s)
76 Form M--Additional Planning Considerations

PART IV ANNOTATED BIBLIOGRAPHY

77 General Facility Planning
80 Vocational-Technical Facility Planning
82 Home Economics Facility Planning

A GUIDE FOR PLANNING FACILITIES FOR

HOME ECONOMICS

OCCUPATIONAL PREPARATION PROGRAMS

PART I

INTRODUCTION

PURPOSE OF GUIDE

The major purpose of this guide is to elicit the necessary information for the writing of educational specifications for facilities to house needed occupational preparation programs in home economics.

In addition to the major purpose of providing important and comprehensive information to be incorporated in educational specifications, the guide is also designed to:

- Assist planners in the formation of creative solutions to the housing of desired educational programs.
- Prevent important considerations from being overlooked in the facility planning process.
- Encourage logical and systematic facility planning.

ORGANIZATION OF GUIDE

The facility planning guide is organized under four major headings or parts. Part I (Introduction) is a discussion of the major purpose, the underlying assumptions, and the guiding principles which were utilized in the preparation of the guide.

In Part II (The Instructional Program) important information is sought on the home economics department basic program features, objectives, and the kinds of occupational preparation programs which will be organized to implement them.

In Part III (Distinct Types of Instructional Areas to be Provided) the actual spaces desired to house the occupational preparation programs are described in detail.

Part IV is an annotated bibliography of reference sources which offer a more detailed treatment of the various phases of facility planning.

UNDERLYING ASSUMPTIONS

Important assumptions were made in the preparation of this guide:

- Major educational program decisions have been or are being made with content of instruction being determined through educational surveys, advisory committees, school board study, etc., and methods of instruction being determined by qualified home economics instructors and other appropriate staff members. The guide will ask important questions which may serve as guidelines to educational program planning.

- The numbers and kinds of students to be served by the program are generally known. Such information has been provided by enrollment projections, housing patterns, census data, student interests studies, etc.

- The information recorded in this guide will be used in the preparation of educational specifications for use by an architect in facility design.

- Sufficient finances are available to support both the provision of facilities and to operate the kinds of educational program outlined in the guide.

GUIDING PRINCIPLES

In planning facilities to house programs of occupational preparation in vocational home economics, it is suggested that educational program and facility decisions be consistent with the following principles.

1. The educational program is the basis for planning space and facilities.

2. Space and facilities should be planned to accommodate changes in the educational program.

3. The program should serve the needs of a variety of groups in the community.

4. Space and facilities for the program can be extended through the use of community resources.

5. Expanded programs are needed in the vocational home economics occupational preparation program to reach not only the average and those who are college bound, but also the unusually gifted, the physically handicapped, the mentally retarded and the culturally deprived.

6. Cooperation among teachers in developing inter-disciplinary units or courses is encouraged by the proximity, flexibility, and convenience of classrooms and work areas where teachers can plan together and produce materials.

7. Safe and healthful housing should be provided for all children.

8. Mobile equipment and convenient space for storing it make the same space available for many purposes, resulting in more efficient use of space.

9. The effective use of mechanical teaching aids, such as projectors, screens, recorders, and other devices, will depend upon the accessibility and convenience of storage.

10. Movable partitions, screens, folding doors, room dividers, and portable furnishings and equipment can help in adjusting space requirements to meet specific needs.

11. Accessible convenient outdoor space adds to the flexibility of the department and can be used in units in dealing with child care and family recreation.

PART II

THE INSTRUCTIONAL PROGRAM

In Part II of the guide, the planner records important instructional program decisions with respect to basic program features, objectives, and needed information on occupational preparation programs to be housed.

BASIC PROGRAM FEATURES

Basic features of the educational program are determined greatly by a school or department's educational philosophy. A philosophy of education provides a base from which program objectives and teaching and learning activities designed to meet these objectives can be derived. In the final analysis, it is the kinds of teaching and learning activities to be carried on which should determine facility needs.

In this section, planners have an opportunity to express basic program features which will serve as guidelines for the planned occupational preparation programs in home economics.

Indicate below the relative degree of emphasis to be placed on each of the program features started by circling the appropriate number. The scale provided for this purpose ranges from 1 for major emphasis, 2 for some emphasis, 3 for slight emphasis, to N for no emphasis. (This same scale will be used frequently throughout the planning guide.)

1 major emphasis
2 some emphasis
3 slight emphasis
N no emphasis

1. Purpose of Program

   a. To prepare students for gainful employment. 1 2 3 N

   b. To prepare students for entry into further training programs. The nature of this further training is: ____________________ 1 2 3 N
   ____
   ____

1 major emphasis
2 some emphasis
3 slight emphasis
N no emphasis

c. To prepare students for successful family living. 1 2 3 N

d. Other important program purposes are:
1) ______________________________ 1 2 3 N
2) ______________________________ 1 2 3 N
3) ______________________________ 1 2 3 N
4) ______________________________ 1 2 3 N

2. Students

a. Students will be selected for entrance into the program. 1 2 3 N
The bases for selection will be:
____
____

b. The program will place emphasis on skill acquisition. 1 2 3 N

c. The program will place emphasis on the learning of theory. 1 2 3 N

d. Students will have access to learning materials. 1 2 3 N

e. Students will be encouraged to act independently. 1 2 3 N

f. Students will be provided with cooperative work experience outside the school. 1 2 3 N

g. Other basic program features in relation to students are:
1) ______________________________ 1 2 3 N
2) ______________________________ 1 2 3 N
3) ______________________________ 1 2 3 N
4) ______________________________ 1 2 3 N

3. Instruction

a. The instructional approach will be single discipline (home economics) as opposed to inter-disciplinary (home economics, science, etc.) If not a single disciplinary approach, describe the inter-disciplinary approach and the disciplines involved: ______________________________ 1 2 3 N
____
____

1 major emphasis
2 some emphasis
3 slight emphasis
N no emphasis

b. Cooperative or team instruction will be used. If this mode of instruction is to be extensively emphasized, describe in general terms: ____________________ 1 2 3 N
____

c. Community resources will be utilized in instruction. 1 2 3 N
If a high emphasis is to be placed on use of community resources, describe some of these resources: ____________
____
____

d. Instructional flexibility is required. 1 2 3 N
If a high emphasis is to be placed on instructional flexibility, describe the kinds of flexibility desired:
____
____

4. Other basic program features important to the planned instructional program are:
a. ____________________________________ 1 2 3 N
____
b. ____________________________________ 1 2 3 N
____
c. ____________________________________ 1 2 3 N
____
d. ____________________________________ 1 2 3 N
____

EDUCATIONAL OBJECTIVES

Educational objectives are often identified as goals or outcomes of the educational program. An objective should describe a desired educational outcome that is consistent with a school's philosophy.

Objectives are important to both the planner and the architect since they determine the school's program and related activities. They provide important implications which when translated into facilities can both enhance as well as adequately house the desired program. Thus it becomes imperative to clearly establish the program objectives prior to embarking on educational specifications and subsequent building design.

The purpose of this part of the guide is to bring together these elements in a way to provide direction and understanding for both the planner and the architect. Space is provided below to indicate

1 major emphasis
2 some emphasis
3 slight emphasis
N no emphasis

degree of emphasis by circling the appropriate number for each of the objectives, and to list additional objectives. The scale provided ranges from 1 for major emphasis down to N for no emphasis.

1. To prepare individuals for entry into gainful employment. 1 2 3 N

2. To motivate and recruit capable and qualified students to enroll in post-high school institutions. 1 2 3 N

3. To help prepare individuals to be effective consumers. 1 2 3 N

4. To provide pre-professional educational training for students who plan to enter colleges and universities. 1 2 3 N

5. To develop in students specific and measurable knowledge and skills in the care and guidance of children which include:

    a. Knowledge of needs and characteristics of young children. 1 2 3 N

    b. Supervision of the activities of young children. 1 2 3 N

    c. Preparation of food for young children. 1 2 3 N

    d. Proper care of sick children. 1 2 3 N

    e. ______________________________ 1 2 3 N

    f. ______________________________ 1 2 3 N

6. To develop in students specific and measurable knowledge and skills in foods preparation and services which include:

    a. Preparation of large quantities of food. 1 2 3 N

    b. Service of large quantities of food. 1 2 3 N

    c. Knowledge of human nutrition. 1 2 3 N

    d. Participation in customer and employee and employer relationships. 1 2 3 N

    e. Knowledge of business management practices. 1 2 3 N

    f. ______________________________ 1 2 3 N

1 major emphasis
2 some emphasis
3 slight emphasis
4 no emphasis

g. ____ 1 2 3 N

7. To develop in students specific and measurable knowledge and skills in clothing management, production, and service which include:

a. Design and construction of clothing 1 2 3 N

b. Operation of power sewing machines 1 2 3 N

c. Selection of clothing for personal wardrobe 1 2 3 N

d. Knowledge of fibers and fabrics 1 2 3 N

e. ____ 1 2 3 N

f. ____ 1 2 3 N

8. To develop in students specific and measurable skills in the area of home furnishings, equipment, and services which include:

a. Construction of home furnishings 1 2 3 N

b. Knowledge and application of interior decoration principles 1 2 3 N

c. Knowledge and application of interior design principles 1 2 3 N

d. Knowledge of business management techniques 1 2 3 N

e. ____ 1 2 3 N

f. ____ 1 2 3 N

9. To develop in students specific and measurable skills in institutional and home management which include:

a. Skills of proper housekeeping 1 2 3 N

b. Preparation and serving of family meals 1 2 3 N

c. Care of sick and elderly persons 1 2 3 N

d. Purchase of foods and other household needs 1 2 3 N

e. ____ 1 2 3 N

f. ____ 1 2 3 N

1 major emphasis
2 some emphasis
3 slight emphasis
N no emphasis

10. Other program objectives include:

a. ________________________________ 1 2 3 N

b. ________________________________ 1 2 3 N

c. ________________________________ 1 2 3 N

d. ________________________________ 1 2 3 N

PROGRAM CONTENT AREAS

The educational program in occupational preparation vocational home economics should be designed to meet its established objectives. All decisions made with respect to educational program should be consistent with established philosophy and objectives.

Instruction in home economics can be classified into the two major categories of *homemaking* and *occupational preparation*. This guide is designed to assist in the planning of facilities for occupational preparation programs.

In homemaking, the courses or units of instruction emphasize acquisition of knowledge and the development of understanding, attitudes, and skills relevant to personal, home, and family life.

In *occupational preparation*, the courses or units of instruction emphasize the students' acquisition of knowledge and the development of understanding, attitudes, and skills relevant to occupational preparation and the utilization of specialized skills of home economics. Learning activities and experiences are organized to enable students to develop competencies essential for entry into their chosen occupations, to further training, or to acquire new or additional competencies for upgrading their occupational profession.

Instruction in occupational home economics is usually given in discrete subject areas or courses. Subject matter is coordinated with appropriate field, laboratory, and work experience. Programs of occupational preparation for the most part can be classified under the five broad headings or *content areas* of: 1) care and guidance of children; 2) clothing management, production, and services; 3) food management, production, and services; 4) home furnishings, equipment, and services; 5) institutional and home management and supporting services.

These five content areas relate directly to the field of home economics and can be used to categorize most occupational preparation programs in the field. However, students in these programs often elect or are required to take courses in subjects such as English, mathematics, and physical education which are available to all students. For example, an eleventh grade student in training to become a child care aide might take the following courses or units:

Courses	Content Areas
Child Care I	Care and Guidance of Children
American History	Academic
Biology	Science
English	Academic
Physical Education I	Physical Education

The concept of content areas is used in this planning guide because different instructional content areas usually call for different kinds of instructional facilities and equipment. The following content areas, which usually call for specialized instructional areas, are used in this guide.

Care and Guidance of Children
Clothing Management, Production, and Services
Food Management, Production, and Services
Home Furnishings, Equipment, and Services
Institutional and Home Management and Supporting Services
Academic (e.g., English, mathematics, and social studies)
Science (e.g., physics, chemistry, and biology)
Music (e.g., band chorus, and choir)
Physical Education
Other (this category is used in the event that a course or unit to be offered will not fit into any of the above content areas)

PLANNING INSTRUCTIONAL AREAS BY MODES OF LEARNING

The planning of instructional areas for vocational facilities can be substantially aided through utilization of the concept of modes of learning. Learning can be divided into three distinct modes--*reaction* learning, *interaction* learning, and *action* learning.

Reaction learning, which often occurs in an instructional area *designed for lecture and demonstration*, is characterized by activities *which tend to be largely* teacher-centered with the central focus on instruction. Student activities include listening, observing, and the taking of notes. Group size for reaction learning may vary from one to a very large number as the number of students has little effect on the learning experience if proper technological aids such as television, microphones, projectors and the like are used. Because student activities are relatively passive in reaction learning, a short optimum time span is normally employed.

Lecture/demonstration areas are usually designed to be used in common for reaction learning in all subject areas. For example, in planning facilities for two diverse occupational preparation programs in home economics such as child care aide training and cooking, the planner should bear in mind that reaction learning for students in both programs can occur in the same kind of instructional area. This means that facility planning should be done in terms of the total program rather than its fractional parts. In many instances, lecture/demonstration areas can be shared not only by occupational preparation programs within vocational service areas, but also shared by distinct and dissimilar service areas such as home economics and business occupations. Where a great deal of facility sharing is planned, the planner should consider the relative merits of optimum location within the total building and the advisability of clustering various instructional areas.

Interaction learning, which often occurs in a seminar-type instructional area, is characterized by both teacher and learner activity participating as both listener and speaker. This mode of learning, of course, must occur in groups; however, sociological research suggests these groups should not exceed fifteen persons for optimum effectiveness. Active interaction of all students generally requires a longer time span than reaction learning.

Seminar areas, like lecture/demonstration areas, are usually designed for common use by all vocational service areas. The same considerations which were outlined for lecture/demonstration areas also apply to seminar areas.

Action learning, which usually occurs in a laboratory instructional area, is characterized by the individual student learning by doing. Although learning is done on an individual basis, students may, nevertheless, function in a group setting. Very often in more flexible types of educational programs, students are scheduled for laboratory work on an individual basis. Since action learning involves overt action by individual students, the teacher's role is largely that of a consultant to the learner.

Laboratory instructional areas, of necessity, are more specialized than lecture/demonstration areas used for reaction learning and seminar areas used for interaction learning. Since laboratory areas are designed to facilitate the learning of specific vocational and technical skills, there is less likelihood of sharing such areas by students in various vocational training programs. However, wherever common elements of skill instruction are found among vocational training programs, the possibility of sharing and clustering laboratory facilities can be both expedient and economical.

NOTE: THE FOLLOWING SECTIONS OF THE GUIDE (PAGES 11-22) ARE DESIGNED TO ASSIST IN MAKING MATHEMATICAL DETERMINATIONS OF THE NUMBER OF VARIOUS KINDS OF INSTRUCTIONAL AREAS NEEDED TO HOUSE THE DESIRED PROGRAM. IF THE NUMBERS OF INSTRUCTIONAL AREAS REQUIRED ARE ALREADY KNOWN, PLANNERS MAY NOW PROCEED DIRECTLY TO FORM E, PAGE 23. IF, HOWEVER, MATHEMATICAL DETERMINATIONS ARE TO BE MADE, ALL FORMS SHOULD BE COMPLETED AS ACCURATELY AS POSSIBLE.

OCCUPATIONAL PREPARATION PROGRAMS TO BE OFFERED

Information for each home economics occupational preparation program to be offered is entered on a separate Form A (pages 19-22). Directions for completing Form A(s) appear on pages 16-17. To assist planners, a sample, completed Form A is given on page 18.

Data entered in the sample Form A are for a child care aide training program. The data were assumed for purpose of illustration. Some other occupational preparation programs commonly offered in the vocational service area of home economics include nursery school assistant, power sewing, fashion merchandising, tailoring, textiles, fashion design, dry cleaning, dietetics, commercial baking, home catering and household service, food processing, chef training, upholstering, housing and home furnishings, interior decoration, interior design, and hotel and motel operation.

Form A for each occupational preparation program should be filled out as completely as possible. However, it is realized, for example, that a home economics instructor completing Form A may be unaware of time allotments and methods of instruction in other subject areas. If such is the case, the instructor can only supply information on courses within the content areas of home economics.

INSTRUCTIONS FOR COMPLETING FORM A

Item 1

Occupational Preparation Program--Enter here the name of the occupational program to be offered, e.g., commercial baking, upholstering, etc. Complete a separate Form A for each occupational preparation program to be offered.

Item 2

Yearly Enrollment--Enter here the projected maximum number of students to be enrolled yearly in the program at all grade levels.

Item 3

Nature of Students--Underline all categories which apply to students to be enrolled in the program.

Item 4

Weeks of Instruction per year--Enter here the number of weeks per year the school will be open for instruction, e.g., 36 weeks, 52 weeks.

Item 5

Total Weekly Periods or Modules--Enter here the total number of periods or modules (if modular scheduling is to be used) per week available for instructional purposes for each student. Do not count periods or modules scheduled for lunch and other non-instructional purposes.

Column 6

Courses of Instruction--List the courses or units of instruction to be offered either on a required or elective basis for the complete occupational preparation program.

Column 7

Content Area--Opposite each course of instruction, enter the appropriate content area as presented on pages 12 and 13.

Column 8

Total Course Enrollment--Opposite each course of instruction, enter the projected maximum student enrollment.

Column 9

Maximum Group Size for Reaction Learning--Opposite each course or unit of instruction, enter the maximum group size in number of students desired for reaction (lecture/demonstration) type learning.

Column 10

Estimated Weekly Periods or Modules of Reaction Level Learning--Opposite each course or unit of instruction, enter the estimated number of periods or modules per week to be devoted to reaction learning (lecture/demonstration) per student.

Column 11

Weekly Group-Periods or Modules (Lecture/Demonstration)--To compute weekly group-periods or modules, divide the entry in Column 8 by the entry in Column 9 and round up to the nearest whole number. Then multiply the whole number by the entry in Column 10.

Column 12

Maximum Group Size for Interaction Learning--Opposite each course or unit of instruction, enter the maximum group size in number of students desired for interaction (seminar) type learning.

Column 13

Estimated Weekly Periods or Modules of Interaction Level Learning--Opposite each course or unit of instruction, enter the estimated number of periods or modules per week to be devoted to interaction learning (seminar) per student.

Column 14

Weekly Group-Periods or Modules (Seminar)--To compute weekly group-periods or modules, divide the entry in Column 8 by the entry in Column 12 and round up to the nearest whole number. Then multiply the whole number by the entry in Column 13.

Column 15

Maximum Group Size for Action Learning--Opposite each course or unit of instruction, enter the maximum group size in number of students desired for action (laboratory) type learning.

Column 16

Estimated Weekly Periods or Modules of Action Level Learning--Opposite each course or unit of instruction, enter the estimated number of periods or modules per week to be devoted to action (laboratory) learning per student.

Column 17

Weekly Group-Periods or Modules (Laboratory)--To compute weekly group-periods or modules, divide the entry in Column 8 by the entry in Column 15 and round up to the nearest whole number. Then multiply the whole number by the entry in Column 16.

FORM A--SAMPLE

FORM A

BASIC PROGRAM INFORMATION

1. Occupational Preparation Program Child Care Aide
2. Yearly Enrollment 120
3. Nature of Students (underline appropriate categories); a. day school[1]; b. night school[1]; c. school age; d. adults; e. males; f. females; other (specify) ____
4. Weeks of Instruction per Year 36
5. Total Weekly Periods or Modules 30

Courses of Instruction	Content Areas	Total Course Enrollment	Maximum Group Sizes, Estimated Weekly Periods or Modules and Calculated Group-Modules or Period-Modules by Levels of Learning								
			REACTION*			INTERACTION**			ACTION***		
			Maximum Group Size	Weekly Periods or Modules	Weekly Group-Periods or Modules	Maximum Group Size	Weekly Periods or Modules	Weekly Group-Periods or Modules	Maximum Group Size	Weekly Periods or Modules	Weekly Group-Periods or Modules
(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
Child Care 1	Child care	60	100	1	1	15	2	8	25	7	21
Child Care 2	Child care	60	100	1	1	15	3	12	25	6	18
Adol. Dev. 1	Child care	60	100	3	3	15	1	4	25	1	3
Adol. Dev. 2	Child care	60	100	2	2	15	2	8	25	1	3
Am. History	Academic	60	50	2	4	15	3	12	0	0	0
Democracy	Academic	60	50	1	2	15	4	16	0	0	0
Biology	Science	20	50	1	1	0	0	0	25	4	8
Chemistry	Science	10	50	2	1	0	0	0	25	5	5
Phys. Ed. 1	Phys. Ed.	35	25	1	2	15	1	3	20	3	6
Phys. Ed. 2	Phys. Ed.	30	25	1	2	15	1	2	20	3	6

---

[1] If both day and night school are to be offered, fill out separate forms for each.

*(Lecture/demonstration)

**(Seminar)

***(Laboratory)

FORM A

BASIC PROGRAM INFORMATION

1. Occupational Preparation Program ______________________________
2. Yearly Enrollment ____________
3. Nature of Students (underline appropriate categories); a. day school[1]; b. night school[1]; c. school age; d. adults; e. males; f. females; other (specify) ______________________
4. Weeks of Instruction per Year __________
5. Total Weekly Periods or Modules __________

Courses of Instruction (6)	Content Areas (7)	Total Course Enrollment (8)	Maximum Group Sizes, Estimated Weekly Periods or Modules and Calculated Group-Modules or Period-Modules by Levels of Learning								
			REACTION*			INTERACTION**			ACTION***		
			Maximum Group Size (9)	Weekly Periods or Modules (10)	Weekly Group-Periods or Modules (11)	Maximum Group Size (12)	Weekly Periods or Modules (13)	Weekly Group-Periods or Modules (14)	Maximum Group Size (15)	Weekly Periods or Modules (16)	Weekly Group-Periods or Modules (17)

---

[1] If both day and night school are to be offered, fill out separate forms for each.
*(Lecture/demonstration)
**(Seminar)
***(Laboratory)

FORM A

BASIC PROGRAM INFORMATION

1. Occupational Preparation Program ______________________________
2. Yearly Enrollment ____________
3. Nature of Students (underline appropriate categories); a. day school[1]; b. night school[1]; c. school age; d. adults; e. males; f. females; other (specify) ____________________
4. Weeks of Instruction per Year __________
5. Total Weekly Periods or Modules __________

Courses of Instruction	Content Areas	Total Course Enrollment	Maximum Group Sizes, Estimated Weekly Periods or Modules and Calculated Group-Modules or Period-Modules by Levels of Learning								
			REACTION*			INTERACTION**			ACTION***		
			Maximum Group Size	Weekly Periods or Modules	Weekly Group-Periods or Modules	Maximum Group Size	Weekly Periods or Modules	Weekly Group-Periods or Modules	Maximum Group Size	Weekly Periods or Modules	Weekly Group-Periods or Modules
(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)

[1] If both day and night school are to be offered, fill out separate forms for each.
*(Lecture/demonstration)
**(Seminar)
***(Laboratory)

FORM A

FORM A

BASIC PROGRAM INFORMATION

1. Occupational Preparation Program ______________________________

2. Yearly Enrollment ______________

3. Nature of Students (underline appropriate categories); a. day school[1]; b. night school[1]; c. school age; d. adults; e. males; f. females; other (specify) ______________________

4. Weeks of Instruction per Year ____________

5. Total Weekly Periods or Modules ___________

Courses of Instruction	Content Areas	Total Course Enrollment	Maximum Group Sizes, Estimated Weekly Periods or Modules and Calculated Group-Modules or Period-Modules by Levels of Learning								
			REACTION*			INTERACTION**			ACTION***		
			Maximum Group Size	Weekly Periods or Modules	Weekly Group-Periods or Modules	Maximum Group Size	Weekly Periods or Modules	Weekly Group-Periods or Modules	Maximum Group Size	Weekly Periods or Modules	Weekly Group-Periods or Modules
(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)

[1] If both day and night school are to be offered, fill out separate forms for each.

*(Lecture/demonstration)

**(Seminar)

***(Laboratory)

FORM A

BASIC PROGRAM INFORMATION

1. Occupational Preparation Program ______________________________
2. Yearly Enrollment ____________
3. Nature of Students (underline appropriate categories); a. day school[1]; b. night school[1]; c. school age; d. adults; e. males; f. females; other (specify) ______________________
4. Weeks of Instruction per Year __________
5. Total Weekly Periods or Modules __________

Courses of Instruction	Content Areas	Total Course Enrollment	Maximum Group Sizes, Estimated Weekly Periods or Modules and Calculated Group-Modules or Period-Modules by Levels of Learning								
			REACTION*			INTERACTION**			ACTION***		
			Maximum Group Size	Weekly Periods or Modules	Weekly Group-Periods or Modules	Maximum Group Size	Weekly Periods or Modules	Weekly Group-Periods or Modules	Maximum Group Size	Weekly Periods or Modules	Weekly Group-Periods or Modules
(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)

[1] If both day and night school are to be offered, fill out separate forms for each.

*(Lecture/demonstration)

**(Seminar)

***(Laboratory)

FORM A

PART III

DISTINCT TYPES OF INSTRUCTIONAL AREAS TO BE PROVIDED

QUANTITATIVE FACILITY NEEDS

The number of instructional areas to house the programs described in Part II (The Instructional Program) are recorded in this section of the guide.

As indicated in Part II, there are three principal types of instructional areas used to accommodate educational programs. They are:

Lecture/demonstration areas--used principally for group reaction learning;

Seminar areas--used principally for group interaction learning; and

Laboratory areas--used principally for group or individual action learning.

In addition to these instructional areas, there are, of course, other school-wide auxiliary areas such as instructional materials centers, language laboratories, gymnasiums, and auditoriums which are part of the overall school plan. Requirements for such facilities are calculated as a part of total school planning and are not made in this guide.

It is recommended that facility needs, including occupational preparation programs in home economics, be made on a school-wide basis in order to provide planners with a balanced picture of the building to be constructed and in order to provide economy and convenience through the sharing and clustering of various kinds of facilities and equipment.

Forms B, C, and D can be used to compute the number of lecture/demonstration, seminar, and laboratory areas required, respectively, for the planned programs in home economics occupational preparation. The use of these forms requires some mathematical ability. Personnel responsible for completing the guide may want to utilize the services of individuals with this special competence.

Results of the computations on Forms B, C, and D are entered on Form E which is a summary of total instructional area requirements for home economics occupational preparation programs.

In the event that instructional area requirements are already determined (e.g., it has been decided that one combination laboratory and lecture/demonstration area will be provided) the information can be recorded directly on Form E without making the computations on Forms B, C, and D.

INSTRUCTIONS FOR COMPLETING FORM B
LECTURE/DEMONSTRATION AREA REQUIREMENTS BY CONTENT AREAS

Column 1

Content Area--Content areas are listed in Column 1.

Column 2

Total Enrollment--To obtain total enrollment for content areas, find the sum total enrollment for each content area as indicated in Columns 7 and 8 of Form A(s) for all occupational preparation programs.

Column 3

Maximum Group Size--Opposite each content area, enter the maximum group size desired for a lecture/demonstration area to serve the content area. (Form A, Column 9).

Column 4

Total Weekly Periods or Modules--Opposite each content area, enter the total periods or modules per week the school will be open for day school instruction. This entry will be identical for all content areas and identical to the number recorded for Item 5, Form A.

Column 5

Total Weekly Reaction Group Periods or Modules--Opposite each content area, enter the total group periods or modules per week to be devoted to reaction learning as indicated in Column 11 of Form A(s) for all occupational preparation programs.

Column 6

Lecture/Demonstration Areas Required--Opposite each content area, enter the quotient of Item 5 divided by Item 4. Round up to the nearest hundredth.

Column 7

Adjusted Lecture/Demonstration Areas Required--To adjust for scheduling difficulties which result in areas being less than 100 percent utilized, multiply the entry in Column 6 by 1.3 and enter the result, rounded up to the nearest hundredth, in Column 7 for each content area.

Column 8

Totals--Since lecture/demonstration areas, unlike laboratory areas, can be utilized by nearly all content areas, the entries in Column 7 can be added for all lecture/demonstration areas with identical maximum group sizes as entered in Column 3. For example, 8a might read 2 lecture/demonstration areas with a student capacity of 50 each.

FORM B--SAMPLE

FORM B

LECTURE/DEMONSTRATION AREA REQUIREMENTS BY CONTENT AREAS

CONTENT AREA (1)	TOTAL ENROLLMENT (2)	MAXIMUM GROUP SIZE (3)	TOTAL WEEKLY PERIODS OR MODULES (4)	TOTAL WEEKLY REACTION GROUP-PERIODS OR MODULES (5)	LECTURE/DEMONSTRATION AREAS REQUIRED (5) ÷ (4) (6)	ADJUSTED LECTURE/DEMONSTRATION AREAS REQUIRED (6) ÷ 1.3 (7)
Care & Guidance of Children	240	100	30	7	0.24	0.31
Clothing Management, Production & Services						
Food Management Production & Services						
Home Furnishings, Equipment & Services						
Institutional & Home Management & Supporting Services						
Academic	120	50	30	6	0.20	0.26
Science	30	50	30	3	0.10	0.13
Music						
Physical Education	65	25	30	4	0.08	0.11
Other (specify)						

(8) Totals (Figures in Column 7 can be added together for areas with same student capacity as entered in Column 3). Round off total to next higher whole number.

a. 1 lecture/demonstration areas with a student capacity of 100, each.
b. 1 lecture/demonstration areas with a student capacity of 100, each.
c. 1 lecture/demonstration areas with a student capacity of 100, each.
d. ______ lecture/demonstration areas with a student capacity of ______, each.

FORM B

LECTURE/DEMONSTRATION AREA REQUIREMENTS BY CONTENT AREAS

CONTENT AREA (1)	TOTAL ENROLLMENT (2)	MAXIMUM GROUP SIZE (3)	TOTAL WEEKLY PERIODS OR MODULES (4)	TOTAL WEEKLY REACTION GROUP-PERIODS OR MODULES (5)	LECTURE/DEMONSTRATION AREAS REQUIRED (5) ÷ (4) (6)	ADJUSTED LECTURE/DEMONSTRATION AREAS REQUIRED (6) ÷ 1.3 (7)
Care & Guidance of Children						
Clothing Management, Production & Services						
Food Management Production & Services						
Home Furnishings, Equipment & Services						
Institutional & Home Management & Supporting Services						
Academic						
Science						
Music						
Physical Education						
Other (specify)						

(8) Totals (Figures in Column 7 can be added together for areas with same student capacity as entered in Column 3). Round off total to next higher whole number.

a. ____________ lecture/demonstration areas with a student capacity of ________, each.
b. ____________ lecture/demonstration areas with a student capacity of ________, each.
c. ____________ lecture/demonstration areas with a student capacity of ________, each.
d. ____________ lecture/demonstration areas with a student capacity of ________, each.

INSTRUCTIONS FOR COMPLETING FORM C
SEMINAR AREA REQUIREMENTS BY CONTENT AREAS

Column 1

Content Area--Content areas are listed in Column 1.

Column 2

Total Enrollment--To obtain total enrollment for content areas, find the sum total enrollment for each content area indicated in Column 7 and 8 of Form A(s) for all occupational preparation programs.

Column 3

Maximum Group Size--Opposite each content area, enter the maximum group size desired for a seminar area to serve the content area. (Form A, Column 12)

Column 4

Total Weekly Periods or Modules--Opposite each content area, enter the total periods or modules per week the school will be open for day school instruction. This entry will be identical for all content areas and identical to the number recorded for Item 5, Form A.

Column 5

Total Weekly Interaction Group Periods or Modules--Opposite each content area, enter the total group periods or modules per week to be devoted to interaction learning as indicated in Column 14 of Form A(s) for all occupational preparation programs.

Column 6

Seminar Areas Required--Opposite each content area, enter the quotient of Item 5 divided by Item 4. Round up to the nearest hundredth.

Column 7

Adjusted Seminar Areas Required--To adjust for scheduling difficulties which result in areas being less than 100 percent utilized, multiply the entry in Column 6 by 1.3 and enter the result, rounded up to the nearest hundredth, in Column 7 for each content area.

Column 8

Totals--Since seminar areas, unlike laboratory areas, can be commonly utilized by nearly all content areas, the entries in Column 8 can be added for all seminar areas with identical maximum group sizes or entered in Column 3. For example, 8a might read 2 seminar areas with a student capacity of 20, each.

FORM C--SAMPLE

FORM C

SEMINAR AREA REQUIREMENTS BY CONTENT AREAS

CONTENT AREA (1)	TOTAL ENROLLMENT (2)	MAXIMUM GROUP SIZE (3)	TOTAL WEEKLY PERIODS OR MODULES (4)	TOTAL WEEKLY INTERACTION GROUP-PERIODS OR MODULES (5)	SEMINAR AREAS REQUIRED (5) ÷ (4) (6)	ADJUSTED SEMINAR AREAS REQUIRED (6) X 1.3 (7)
Care & Guidance of Children	240	15	30	32	1.07	1.40
Clothing Management, Production & Services						
Food Management, Production & Services						
Home Furnishings, Equipment & Services						
Institutional & Home Management & Supporting Services						
Academic	120	15	30	28	0.94	1.22
Science	30	0	30	0	0	0
Music						
Physical Education	65	15	30	5	0.17	0.28
Other (specify)						

(8) Totals (Figures in Column 7 can be added together for areas with same student capacity as entered in Column 3). Round up total to next higher whole number.

a. ______3______ seminar areas with a minimum student capacity of __15__, each.
b. ____________ seminar areas with a minimum student capacity of ______, each.
c. ____________ seminar areas with a minimum student capacity of ______, each.
d. ____________ seminar areas with a minimum student capacity of ______, each.

FORM C

SEMINAR AREA REQUIREMENTS BY CONTENT AREAS

CONTENT AREA (1)	TOTAL ENROLLMENT (2)	MAXIMUM GROUP SIZE (3)	TOTAL WEEKLY PERIODS OR MODULES (4)	TOTAL WEEKLY INTERACTION GROUP-PERIODS OR MODULES (5)	SEMINAR AREAS REQUIRED (5) ÷ (4) (6)	ADJUSTED SEMINAR AREAS REQUIRED (6) X 1.3 (7)
Care & Guidance of Children						
Clothing Management, Production & Services						
Food Management, Production & Services						
Home Furnishings, Equipment & Services						
Institutional & Home Management & Supporting Services						
Academic						
Science						
Music						
Physical Education						
Other (specify)						

(8) Totals (Figures in Column 7 can be added together for areas with same student capacity as entered in Column 3). Round up total to next higher whole number.

a. ______________ seminar areas with a minimum student capacity of ______, each.
b. ______________ seminar areas with a minimum student capacity of ______, each.
c. ______________ seminar areas with a minimum student capacity of ______, each.
d. ______________ seminar areas with a minimum student capacity of ______, each.

INSTRUCTIONS FOR COMPLETING FORM D
LABORATORY AREA REQUIREMENTS BY CONTENT AREAS

Column 1

Content Area--Content areas are listed in Column 1.

Column 2

Total Enrollment--To obtain total enrollment for content areas, find the sum total enrollment for each area as indicated in Columns 7 and 8 of Form A for all occupational preparation programs.

Column 3

Maximum Group Size--Opposite each content area, enter the maximum group size desired for a laboratory area to serve the content area (Form A, Column 15).

Column 4

Total Weekly Periods or Modules--Opposite each content area, enter the total periods or modules per week the school will be open for day school instruction. This entry will be identical for all content areas and identical to the number recorded for Item 5, Form A.

Column 5

Total Weekly Action Group Periods or Modules--Opposite each content area, enter the total group-periods or modules per week to be devoted to action learning as indicated in Column 17 of Form A(s) for all occupational preparation programs.

Column 6

Laboratory Areas Required--Opposite each content area, enter the quotient of Item 5 divided by Item 4. Round up to the nearest hundredth.

Column 7

Adjusted Laboratory Areas Required--To adjust for scheduling difficulties which result in areas being less than 100 percent utilized, multiply the entry in Column 6 by 1.3 and enter the result, rounded up to the nearest hundredth, in Column 7 for each content area.

FORM D--SAMPLE

FORM D

LABORATORY AREA REQUIREMENTS BY CONTENT AREAS

CONTENT AREA (1)	TOTAL ENROLLMENT (2)	MAXIMUM GROUP SIZE (3)	TOTAL WEEKLY PERIOD OR MODULES (4)	TOTAL WEEKLY ACTION GROUP-PERIODS OR MODULES (5)	LABORATORY AREAS REQUIRED (5) ÷ (4) (6)	LABORATORY ADJUSTED AREAS REQUIRED (6) X 1.3 (7)
Care & Guidance of Children	240	25	30	45	1.50	1.95
Clothing Management, Production & Services						
Food Management, Production & Services						
Home Furnishings, Equipment & Services						
Institutional & Home Management & Supporting services						
Academic	120	0	30	0	0	0
Science	30	15	30	13	0.44	0.57
Music						
Physical Education	65	20	30	12	0.40	0.52
Other (specify)						

FORM D

LABORATORY AREA REQUIREMENTS
BY CONTENT AREAS

CONTENT AREA (1)	TOTAL ENROLLMENT (2)	MAXIMUM GROUP SIZE (3)	TOTAL WEEKLY PERIOD OR MODULES (4)	TOTAL WEEKLY ACTION GROUP-PERIODS OR MODULES (5)	LABORATORY AREAS REQUIRED (5) ÷ (4) (6)	LABORATORY ADJUSTED AREAS REQUIRED (6) X 1.3 (7)
Care & Guidance of Children						
Clothing Management, Production & Services						
Food Management, Production & Services						
Home Furnishings, Equipment & Services						
Institutional & Home Management & Supporting services						
Academic						
Science						
Music						
Physical Education						
Other (specify)						

E
D

FORM E

SUMMARY OF FACILITY REQUIREMENTS FOR HOME ECONOMICS OCCUPATIONAL PREPARATION PROGRAMS

1. Lecture/demonstration areas for reaction learning (See Form B)
   ex. ___1___ area(s) with a student capacity of __25__, each.

   a. _______ area(s) with a student capacity of _____, each.
   b. _______ area(s) with a student capacity of _____, each.
   c. _______ area(s) with a student capacity of _____, each.
   d. _______ area(s) with a student capacity of _____, each.

2. Seminar areas for interaction learning (See Form C)
   ex. ___3___ area(s) with a student capacity of __15__, each.

   a. _______ area(s) with a student capacity of _____, each.
   b. _______ area(s) with a student capacity of _____, each.

3. Laboratory areas for action learning (See Form D)
   ex. ___1___ care and guidance of children laboratory area(s) with a student capacity of __25__, each.

   a. _______ care and guidance of children laboratory area(s) with a student capacity of _____, each.
   b. _______ clothing laboratory area(s) with a student capacity of _____, each.
   c. _______ foods laboratory area(s) with a student capacity of _____, each.
   d. _______ home furnishings laboratory area(s) with a student capacity of _____, each.
   e. _______ institutional and home management laboratory area(s) with a student capacity of _____, each.

4. Multi-purpose areas

If any of the specialized areas above are to be combined as multi-purpose spaces, indicate the combinations desired.

ex. Care and guidance of children laboratory and lecture/demonstration area

a. ____
b. ____
c. ____
d. ____

QUALITATIVE FACILITY NEEDS

In this section, detailed information on the kind of instructional areas required is recorded. Special forms are provided for describing the nature of lecture/demonstration areas, seminar areas, laboratory areas, and auxiliary areas to be provided. For each type of instructional area required information is sought in the following categories.

1. The relationship of the area to other instructional areas (specialized vs. multi-purpose utilization of space).
2. The number of these kinds of areas needed.
3. The activities of students and teachers in the instructional area.
4. The spatial relationships within the area and the area's spatial relationships to other instructional areas and the building as a whole.
5. The furniture and equipment required for the area.
6. The environmental factors required for the area.
7. The special utility services required for the area.
8. The minimum space requirements required for the area.

FORM F

DESCRIPTION OF LECTURE/DEMONSTRATION AREA(S) TO BE USED PRINCIPALLY FOR GROUP REACTION LEARNING

1. The lecture/demonstration area(s) should be planned:

a. As independent unit(s)	Yes	No
b. In combination with ______________ (specify) laboratory area(s)	Yes	No
c. In combination with seminar area(s)	Yes	No
d. As an area within a single multi-purpose space	Yes	No

2. Number of lecture/demonstration areas required for the desired program (See Form E) __________

3. Student and teacher activities in this space. Indicate the extent to which each of the activities listed below will occur.

a. Listening to lectures	1 2 3 N
b. Observing demonstrations	1 2 3 N
c. Taking notes	1 2 3 N
d. Viewing films, slides, overhead projections, etc.	1 2 3 N
e. ______________________________	1 2 3 N
f. ______________________________	1 2 3 N

4. Spatial relationships. Indicate the extent to which the lecture/demonstration area(s) should be accessible to the:

a. Instructional materials center	1 2 3 N
b. Building entrance	1 2 3 N
c. Delivery area	1 2 3 N
d. Other instructional areas	
1) ____________________	1 2 3 N
2) ____________________	1 2 3 N
3) ____________________	1 2 3 N
e. Other building areas	
1) ____________________	1 2 3 N
2) ____________________	1 2 3 N
3) ____________________	1 2 3 N

5. Furniture and Equipment

a. Student seating	
1) Individual desks and chairs	P A NA*
a) Number of desks and chairs required	________
b) Provision for storage	Yes No
2) Permanent-type desks	P A NA
a) Number required	________
b) Provision for storage	Yes No

---

*Code: P = Preferred; A = Acceptable; NA = Not Acceptable. This is used frequently throughout this part of the guide.

FORM F

3) Desk and chair combination	P A NA
a) Number required	________
b) Provision for storage	Yes No
4) Tables and chairs	P A NA
a) Number of tables required	________
b) Number of chairs required	________
c) Provision for storage	Yes No
5) Auditorium-type seating	P A NA
Number of seats required	________
b. Stage	Yes No
1) Permanent type	P A NA
2) Portable type	P A NA
The approximate area in square feet desired	________
c. Sound amplifying system	P A NA
d. Controls for regulating light intensity	P A NA
e. Lectern	
1) Permanent type	P A NA
2) Portable type	P A NA
3) Provision for storage	Yes No
f. Projection screen	
1) Built-in type	P A NA
2) Portable type	P A NA
3) Approximate dimensions	________
4) Provision for storage	Yes No

g. Other equipment required for lecture/demonstration area(s) are:

1) ______________________________

2) ______________________________

3) ______________________________

4) ______________________________

6. Environmental factors

a. Aesthetic. Factors to be considered in the aesthetic domain are colors, light, style of architecture, design and the like. Indicate any special aesthetic considerations important to the planning of the lecture/demonstration area(s).

____

____

____

____

b. Aerial. Factors to be considered in this category include air temperature, radiant temperature, relative humidity, and ventilation. Indicate any special considerations important to the planning of the lecture/demonstration area(s).

____

____

____

____

FORM F

c. Visual. A properly controlled and balanced visual environment is important. The visual environment affects such things as accuracy in perception, attention to tasks, and speed of performance. Indicate any special factors which should be taken into account and planning the visual environment of the lecture/demonstration area(s).

____
____
____
____

d. Sonic. Factors to be considered in this category include such things as acoustical requirements and sound systems. Indicate any special consideration important to the planning of the lecture/demonstration area(s).

____
____
____
____

e. Safety. In planning a school building, safety for pupils and teachers is of prime concern. Indicate any special safety considerations which have implications for design of the lecture/demonstration area(s).

____
____
____
____

7. Vertical instructional surfaces

a. Chalkboard	Yes No
1) Wall-mounted	P A NA
2) Number of lineal feet	________
3) Portable	P A NA
4) Provision for storage	Yes No
b. Tackboard	P A NA
Number of lineal feet	________
c. Pegboard	P A NA
Number of lineal feet	________

8. Special utility services required

a. Electricity for:	
1) Projection equipment	Yes No
2) Sound amplifying equipment	Yes No
3) Electrical needs for other equipment (specify)	Yes No

a) ______________________
b) ______________________
c) ______________________
d) ______________________

FORM F

b. Other utility needs for the lecture/demonstration area(s)
1) ______________________________
2) ______________________________
3) ______________________________
4) ______________________________

9. The minimum space requirement in square feet for each lecture/demonstration area. (Optional) ____________________________ (The planner should be aware of any state or local regulations or recommendations concerning floor space requirements.)

10. Other important factors to be considered in the planning of the lecture/demonstration area(s) are:
____
____
____
____
____
____
____
____
____
____
____

FORM G

DESCRIPTION OF SEMINAR AREA(S) TO BE USED PRINCIPALLY FOR GROUP INTERACTION LEARNING

1. The seminar area(s) should be planned:

a.	As independent unit(s)	Yes	No
b.	In combination with ____________________ laboratory area(s) (specify)	Yes	No
c.	In combination with lecture/demonstration area(s)	Yes	No
d.	As an area within a single multi-purpose space	Yes	No

2. The number of seminar area(s) required for the desired program (See Form E) ________

3. Student and teacher activities in this space. Indicate the extent to which each of the activities listed below will occur.

a.	Small group discussing	1	2	3	N
b.	Viewing films, slides, overhead projections, etc.	1	2	3	N
c.	Demonstrating	1	2	3	N
d.	Reporting	1	2	3	N
e.	Working on projects	1	2	3	N
f.	____________________________	1	2	3	N
g.	____________________________	1	2	3	N

4. Spatial relationships. Indicate the extent to which the seminar area(s) should be accessible to the:

a.	Instructional materials center	1	2	3	N
b.	Building entrance	1	2	3	N
c.	Delivery area	1	2	3	N
d.	Other instructional areas	1	2	3	N
	1) ________________________	1	2	3	N
	2) ________________________	1	2	3	N
	3) ________________________	1	2	3	N
e.	Other building areas	1	2	3	N
	1) ________________________	1	2	3	N
	2) ________________________	1	2	3	N
	3) ________________________				

5. Furniture and equipment

a. Seminar table	Yes		No
1) Number required	________		
2) Seating for how many persons	________		
3) Permanent type	P	A	NA
4) Portable type	P	A	NA
5) Provision for storage	Yes		No
b. Chairs			
1) Number required	________		
2) Straight-back type	P	A	NA

P A NA
Yes No

3) Folding type
4) Provision for storage

c. Other equipment required for seminar area(s) are:
1) ______________________
2) ______________________
3) ______________________

6. Environmental factors

a. Aesthetic. Factors to be considered in the aesthetic domain are colors, light, style of architecture, design and the like. Indicate any special aesthetic considerations important to the planning of the seminar areas.

b. Aerial. Factors to be considered in this category include air temperature, radiant temperature, relative humidity, and ventilation. Indicate any special considerations important to the planning of the seminar area(s).

c. Visual. A properly controlled and balanced visual environment is important. The visual environment affects such things as accuracy in perception, attention to tasks, and speed of performance. Indicate any special factors which should be taken into account in planning the visual environment of the seminar area(s).

d. Sonic. Factors to be considered in this category include such things as accoustical requirements and sound system. Indicate any special considerations important to the planning of the seminar area(s).

e. Safety. In planning a school building, safety for pupils and teachers is of prime concern. Indicate any special safety considerations which have implications for design of the seminar area(s).

8. Vertical instructional surfaces

FORM G

a. Chalkboard	Yes No
1) Wall-mounted	P A NA
2) Number of lineal feet	________
3) Portable	P A NA
4) Provision for storage	Yes No
b. Tackboard	P A NA
Number of lineal feet	________
c. Pegboard	P A NA
Number of lineal feet	________

9. Special utility services required

a. Electricity

1) Projection equipment	Yes No
2) Sound amplifying equipment	Yes No
3) Electrical needs for other equipment (specify)	

____
____
____
____

b. Other utility needs for the seminar area(s)
1) ______________________________
2) ______________________________
3) ______________________________
4) ______________________________

10. Minimum space requirement in square feet for each seminar area (Optional) ____________ (The planner should be aware of any state or local regulations or recommendations concerning floor space requirements.)

11. Other important factors to be considered in the planning of the seminar area(s) are:

____
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____

FORM H

DESCRIPTION OF CARE AND GUIDANCE OF CHILDREN LABORATORY AREA(S) TO BE USED PRINCIPALLY FOR ACTION LEARNING

1. The Care and Guidance of Children Laboratory Area(s) should be planned:

a.	As independent unit(s)	Yes	No
b.	In combination with ______________ laboratory area(s) (specify)	Yes	No
c.	In combination with seminar area(s)	Yes	No
d.	In combination with lecture/demonstration area(s)	Yes	No
e.	As an area within a single multi-purpose space	Yes	No

2. Student capacity required for scheduled activities (See Form E) ________

3. Student and teacher activities in various space divisions within the care and guidance of children laboratory area(s). Indicate the extent to which each activity will occur.

a. Outside play space				
1) Conducting childrens games and activities	1	2	3	N
2) Supervising childrens activities	1	2	3	N
3) ______________________	1	2	3	N
b. Inside nursery school play space				
1) Supervising indoor play	1	2	3	N
2) ______________________	1	2	3	N
3) ______________________	1	2	3	N
c. Observation space or room				
1) Observing children and their activities	1	2	3	N
2) ______________________	1	2	3	N
3) ______________________	1	2	3	N
d. Classroom space				
1) Conducting children's games and activities	1	2	3	N
2) Directing quiet activities	1	2	3	N
3) Teaching about the physical world through science experiences	1	2	3	N
4) Supervising and teaching good health habits and safety	1	2	3	N
5) ______________________	1	2	3	N
e. Isolation space				
1) Caring for sick children	1	2	3	N
2) ______________________	1	2	3	N
f. Kitchen space				
1) Preparing food for children	1	2	3	N
2) Serving food to children	1	2	3	N
3) ______________________	1	2	3	N

g. Other space(s) (specify)____________	1	2	3	N
1) ______________________________	1	2	3	N
2) ______________________________	1	2	3	N
3) ______________________________	1	2	3	N

4. Spatial relationships. Indicate the extent to which spaces should be accessible to each other.

a. Within the care and guidance of children laboratory area(s)

1) Outside play space to:				
a) Inside nursey school play space	1	2	3	N
b) Observation room	1	2	3	N
c) Classroom space	1	2	3	N
d) Toilet room(s)	1	2	3	N
e) Isolation space	1	2	3	N
f) Kitchen space	1	2	3	N
g) Other (specify)				
______________________	1	2	3	N
______________________	1	2	3	N
2) Inside nursery school play spaces:				
a) Observation room	1	2	3	N
b) Classroom space	1	2	3	N
c) Toilet room(s)	1	2	3	N
d) Isolation space	1	2	3	N
e) Kitchen space	1	2	3	N
f) Other	1	2	3	N
3) Classroom space to:				
a) Toilet room(s)	1	2	3	N
b) Isolation space	1	2	3	N
c) Kitchen space	1	2	3	N
d) Other	1	2	3	N
4) Toilet room(s) to:				
a) Isolation space	1	2	3	N
b) Kitchen space	1	2	3	N
c) Other	1	2	3	N
5) Isolation space to:				
a) Kitchen space	1	2	3	N
b) Other	1	2	3	N
6) Kitchen space to: Other	1	2	3	N

b. Care and guidance of children laboratory area(s) to:

1) Instructional materials center	1	2	3	N
2) Building entrance	1	2	3	N
3) Delivery area	1	2	3	N
4) Other instructional areas	1	2	3	N
5) Other building areas (specify)				
a) ______________________	1	2	3	N
b) ______________________	1	2	3	N
c) ______________________	1	2	3	N

5. Furniture and equipment

a. Gas ranges	P	A	NA
Number of ranges required	________		

FORM H

b. Electric ranges	P A NA
Number of ranges required	________
c. Children's toilet	
1) Separation according to sex	P A NA
2) Number of water closets required	________
3) Number of low sinks required	________
d. Teachers desk	
1) Single-pedestal	P A NA
2) Double-pedestal	P A NA
3) Provision for storage	Yes No
e. Filing cabinets	
1) Legal-size drawers	P A NA
2) Number of drawers required	________
3) Letter-size drawers	P A NA
4) Number of drawers required	________
f. Magazine racks	P A NA
1) Number required	________
2) Provision for storage	Yes No
g. Provision for darkening area(s)	
1) Opaque blinds	P A NA
2) Flexible room partitions	P A NA
a) Provision for storage	Yes No
h. Projection screen	
1) Wall-mounted	P A NA
2) Provision for storage	Yes No
i. Chairs for children	
1) Folding type	P A NA
a) Number required	________
b) Provision for storage	Yes No
2) Straight-back type	P A NA
a) Number required	________
b) Provision for storage	Yes No
j. Tables for children	
1) Folding type	P A NA
a) Number required	________
b) Provision for storage	Yes No
2) Permanent type	P A NA
a) Number required	________
b) Provision for storage	Yes No
k. Classroom library shelving	
1) Fixed, open shelving	P A NA
Lineal feet required	________
2) Movable, open shelving	P A NA
a) Lineal feet required	________
b) Provision for storage	Yes No
3) Fixed, closed shelving	P A NA
Lineal feet required	________
4) Movable, closed shelving	P A NA
a) Lineal feet required	________
b) Provision for storage	Yes No
l. Student seating	
1) Individual desks and chairs	P A NA
a) Number of desks required	________

b) Provision for storage	Yes No
2) Permanent type	P A NA
a) Number required	________
b) Provision for storage	Yes No
3) Desk and chair combination	P A NA
a) Number required	________
b) Provision for storage	Yes No
4) Tables and chairs	P A NA
a) Number required	________
b) Provision for storage	Yes No
m. Carpet on indoor play area	P A NA
n. Built-in locker for storage of childrens coats, etc.	P A NA
o. Low drinking fountain	
1) Inside	P A NA
2) Outside	P A NA
p. Toys	
Provision for storage	Yes No

q. Other equipment required for care and guidance of children laboratory area(s) are:

1) ______________________________
2) ______________________________
3) ______________________________
4) ______________________________

6. Environmental factors

a. Aesthetic. Factors to be considered in the aesthetic domain are colors, light, style of architecture, design and the like. Indicate any special aesthetic considerations important to the planning of the care and guidance of children laboratory area(s).

____
____
____
____

b. Aerial. Factors to be considered in this category include air temperature, radiant temperature, relative humidity, and ventilation. Indicate any special considerations important to the planning of the care and guidance of children laboratory area(s).

____
____
____
____

c. Visual. A properly controlled and balanced visual environment is important. The visual environment affects such things as accuracy in perception, attention to tasks, and speed of performance. Indicate any special factors which should be taken into account in planning the visual environment of the care and guidance of children laboratory area(s). ______________________________

____
____

FORM H

d. Safety. In planning school buildings, safety for pupils and teachers is of prime concern. Indicate any special safety considerations which have implications of the care and guidance of children laboratory area(s).

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____
____
____

7. Vertical instructional surfaces

a. Chalkboard
   1) Wall-mounted — P A NA
      Number of lineal feet ________
   2) Portable — P A NA
      a) Number of lineal feet ________
      b) Provision for storage — Yes No
b. Tackboard — P A NA
   Number of lineal feet ________
c. Pegboard — P A NA
   Number of lineal feet ________

8. Special utility services required

a. Electricity
   1) Ranges — Yes No
      a) 110 V AC — Yes No
      b) 220 V AC — Yes No
   2) Special lighting requirements (specify)
      a) ____________________
      b) ____________________
      c) ____________________
      d) ____________________
   3) Electrical needs for other equipment (specify)
      a) ____________________
      b) ____________________
      c) ____________________
      d) ____________________
b. Gas
   1) Ranges — Yes No
   2) Other equipment using natural gas
      a) ____________________
      b) ____________________
c. Water
   1) Drinking fountain(s) — Yes No
   2) Sinks — Yes No
   3) Garbage disposer — Yes No
   4) Toilets — Yes No
   5) Other (specify) ________
      ____

9. Minimum space requirements in square feet (optional)

a. Floor area in square feet for entire child care and guidance laboratory area ____________________

b. If distinct space divisions are desired according to function, give minimum floor area requirements in square feet for each of the following areas if included in desired program.

1) Outside play area ________
2) Inside nursery school play area ________
3) Observation room ________
4) Classroom space ________
5) Toilet area ________
6) Isolation area ________
7) Kitchen area ________
8) ____________________________ ________
9) ____________________________ ________

10. Other important factors to be considered in the planning of the child care and guidance laboratory area(s) are:

____
____
____
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____
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____
____

FORM I

DESCRIPTION OF FOODS LABORATORY AREA(S) TO BE USED PRINCIPALLY FOR ACTION LEARNING

1. The foods laboratory area(s) should be planned:

a. As independent unit(s)	Yes	No
b. In combination with ____________ laboratory area(s) (specify)	Yes	No
c. In combination with seminar area(s)	Yes	No
d. In combination with lecture/demonstration area(s)	Yes	No
e. As an area within a single multi-purpose area(s)	Yes	No

2. Student capacity required for scheduled activities (See Form E) ____________

3. Student and teacher activities in various space divisions within the Foods Laboratory area(s). Indicate the extent to which each activity will occur.

a. Vegetable and meat sauce				
1) Planning menus	1	2	3	N
2) Preparing food in quantity	1	2	3	N
3) Cooking food in quantity	1	2	3	N
4) Storing food	1	2	3	N
5) ____________________	1	2	3	N
6) ____________________	1	2	3	N
b. Baking space				
1) Mixing baking ingredients	1	2	3	N
2) Baking	1	2	3	N
3) Storing baking products	1	2	3	N
4) Cooling baking products	1	2	3	N
5) ____________________	1	2	3	N
6) ____________________	1	2	3	N
c. Salad space				
1) Making such foods as salads, sandwiches, cold plates, beverages, and juices	1	2	3	N
2) Making coffee	1	2	3	N
3) ____________________	1	2	3	N
4) ____________________	1	2	3	N
d. Sanitation or dish and pot washing space				
1) Hand washing of dishes	1	2	3	N
2) Machine washing of dishes	1	2	3	N
3) Disposing of foods	1	2	3	N
4) Scraping dishes	1	2	3	N
5) ____________________	1	2	3	N
6) ____________________	1	2	3	N
e. Serving space				
1) Serving foods in quantity	1	2	3	N
a) Cafeteria style	P	A	NA	
b) Buffet style	P	A	NA	
c) Formal style	P	A	NA	
d) Family style	P	A	NA	
e) Hospital style	P	A	NA	

2) Busing dishes	1	2	3	N
3) Dining in groups	1	2	3	N
a) Maximum size of group	________			
b) Dining in groups of seven or more	P	A	NA	
c) Dining in groups of four to six	P	A	NA	
d) Other (specify) ________________	P	A	NA	
f. Laundry space				
1) Washing towels, linens, etc.	1	2	3	N
2) Drying towels, linens, etc.	1	2	3	N
3) ______________________________	1	2	3	N
4) ______________________________	1	2	3	N
g. Other activities in food laboratory area(s) or related areas				
1) Screening pupils for occupations in the foods industry	1	2	3	N
2) Applying knowledge of human nutrition	1	2	3	N
3) Learning and practicing management processes	1	2	3	N
4) Practicing health, safety, and sanitation procedures	1	2	3	N
5) Participating in customer and employee-employer relationships	1	2	3	N
6) Learning employment policies and practices	1	2	3	N
7) Learning skills to be used as a waitress	1	2	3	N
8) Learning skills to be used as a busboy	1	2	3	N
9) ______________________________	1	2	3	N
10) ______________________________	1	2	3	N

4. Spatial relationships. Indicate the extent to which spaces should be accessible to each other.

a. Within the Foods Laboratory area(s)				
1) Vegetable and meat space to:				
a) Baking space	1	2	3	N
b) Salad space	1	2	3	N
c) Sanitation space	1	2	3	N
d) Serving space	1	2	3	N
e) Laundry space	1	2	3	N
f) Classroom or related space	1	2	3	N
g) Storage space				
(1) Dry storage	1	2	3	N
(2) Refrigerated storage	1	2	3	N
(3) Freezer storage	1	2	3	N
2) Baking space to:				
a) Salad space	1	2	3	N
b) Sanitation space	1	2	3	N
c) Serving space	1	2	3	N
d) Laundry space	1	2	3	N
e) Classroom or related space	1	2	3	N
f) Storage space	1	2	3	N
(1) Dry storage	1	2	3	N
(2) Refrigerated storage	1	2	3	N
(3) Freezer storage	1	2	3	N

3) Sanitation space to:	
a) Salad space	1 2 3 N
b) Serving space	1 2 3 N
c) Laundry space	1 2 3 N
d) Classroom or related space	1 2 3 N
e) Storage space	1 2 3 N
(1) Dry storage	1 2 3 N
(2) Refrigerated storage	1 2 3 N
(3) Freezer storage	1 2 3 N
4) Salad space to:	
a) Serving space	1 2 3 N
b) Laundry space	1 2 3 N
c) Classroom or related space	1 2 3 N
d) Storage space	1 2 3 N
(1) Dry storage	1 2 3 N
(2) Refrigerated storage	1 2 3 N
(3) Freezer storage	1 2 3 N
5) Serving space to:	
a) Laundry space	1 2 3 N
b) Classroom or related space	1 2 3 N
c) Storage space	1 2 3 N
(1) Dry storage	1 2 3 N
(2) Refrigerated storage	1 2 3 N
(3) Freezer storage	1 2 3 N
b. Foods Laboratory area(s) to:	
1) Instructional materials center	1 2 3 N
2) Building entrance	1 2 3 N
3) Delivery area	1 2 3 N
4) Other instructional areas	
a) ____________________	1 2 3 N
b) ____________________	1 2 3 N
c) ____________________	1 2 3 N
5) Other building areas	
a) ____________________	1 2 3 N
b) ____________________	1 2 3 N
c) ____________________	1 2 3 N

5. Furniture and Equipment

a. Bakery oven(s)	Yes No
1) Number required	________
2) Gas-fired	P A NA
3) Electric	P A NA
4) Electrical voltage(s) required	____ Volts
5) Ventilation hood required	Yes No
6) Further description (capacity and other requirements) ____________ ____________________	
b. Restaurant dishwasher(s)	Yes No
1) Number required	________
2) Electrical voltage(s) required	____ Volts
3) Hot water	Yes No
4) Steam	Yes No
5) Further description (capacity and other requirements) ____________ ____________________	

FORM I

c.	Table(s) on wheels for meatcutting, pastry, and breadwork	Yes No
	1) Number required	______
	2) Provision for storage	Yes No
	3) Further description (dimensions of top, etc.) ______ ______	
d.	Commercial range(s)	Yes No
	1) Number required	______
	2) Gas-fired	P A NA
	3) Electric	P A NA
	4) Electrical voltage(s) required	____Volts
	5) Ventilation hood(s) required	Yes No
	6) Further description ______ ______	
e.	Large mixer(s)	Yes No
	1) Number required	______
	2) Electrical voltage required	____Volts
	3) Portable	P A NA
	4) Provision for storage	Yes No
	5) Further description ______ ______	
f.	Tables for student classwork	Yes No
	1) Student capacity per table	______
	2) Number required	______
	3) Provision for storage	Yes No
	4) Further description ______ ______	
g.	Student chairs	Yes No
	1) Number required	______
	2) Provision for storage	Yes No
	3) Further description ______ ______	
h.	Platform-type scale(s)	Yes No
	1) Number required	______
	2) Capacity in pounds	______
	3) Provision for storage	Yes No
	4) Further description ______ ______	
i.	Reach-in storage freezer(s)	Yes No
	1) Capacity required	____sq. ft.
	2) Electrical voltage required	____ Volts
	3) Further description ______ ______	
j.	Walk-in storage freezer	Yes No
	1) Capacity required	____sq. ft.
	2) Electrical voltage required	____ Volts
	3) Further description ______ ______	
k.	Commercial refrigerator(s)	Yes No
	1) Gas	P A NA
	2) Electric	P A NA
	3) Electrical voltage required	____Volts

FORM I

4) Number required ________
5) Further description ____________________
____

l. Demonstration table(s) Yes No
1) Number required ________
2) Portable Yes No
3) Provision for storage Yes No
4) Further description ____________________
____

m. Small refrigerator(s) Yes No
1) Number required ________
2) Gas P A NA
3) Electric P A NA
4) Electrical voltage required ____Volts
5) Capacity required ____sq. ft.
6) Further description ____________________
____

n. Portable hot and cold serving chart Yes No
1) Number required ________
2) Provision for storage Yes No
3) Further description ____________________
____

o. Cafeteria serving counter Yes No
1) Lineal feet required ________
2) Further description ____________________
____

p. Bakery work table(s) Yes No
1) Lineal feet required ________
2) Further description ____________________
____

q. Portable bakery pan racks Yes No
1) Number required ________
2) Provision for storage Yes No
3) Further description ____________________
____

r. Cooling racks for bakery products Yes No
1) Number required ________
2) Provision for storage Yes No
3) Further description ____________________
____

s. Bakery mixer(s) with attachments Yes No
1) Number required ________
2) Electrical voltage required ____Volts
3) Portable Yes No
4) Provision for storage Yes No
5) Further description ____________________
____

t. 25-inch spring scales Yes No
1) Number required ________
2) Provision for storage Yes No
3) Further description ____________________
____

u. Salad preparation table	Yes No
1) Stainless steel top	P A NA
2) Wood top	P A NA
3) Number required	________
4) Further description ________________	
______________________________	
v. Dish scraping table	Yes No
1) Number required	________
2) Further description ________________	
______________________________	
w. Pre-rinse spray sink with tray	Yes No
1) Hot and cold water	Yes No
2) Further description ________________	
______________________________	
x. Storage provision for clean dishes	Yes No
1) Shelves or racks	P A NA
2) Dish table(s)	P A NA
3) Other (specify) ________________	
______________________________	
y. Clothes washer(s)	Yes No
1) Number required	________
2) Gas	P A NA
3) Electric	P A NA
4) Electrical voltage required	___Volts
5) Further description ________________	
______________________________	
z. Clothes dryer(s)	Yes No
1) Number required	________
2) Gas	P A NA
3) Electric	P A NA
4) Electrical voltage required	___Volts
5) Further description ________________	
______________________________	
aa. Steam kettle	Yes No
1) Number required	________
2) Capacity	________
3) Utility requirements ________________	
______________________________	
4) Further description ________________	
______________________________	

bb. Other major equipment needs for the foods laboratory area(s): ______________________________

____

____

6. Environmental factors

a. Aesthetic. Factors to be considered in the aesthetic domain are colors, light, style of architecture, design and the like. Indicate any special aesthetic considerations important to the planning of the foods laboratory area(s).

____

____

b. Aerial. Factors to be considered in this category include air temperature, radiant temperature, relative humidity, and ventilation. Indicate any special considerations important to the planning of the foods laboratory area(s).

c. Visual. A properly controlled and balanced visual environment is important. The visual environment affects such things as accuracy in perception, attention to tasks, and speed of performance. Indicate any special factors which should be taken into account in planning the visual environment of the foods laboratory area(s).

d. Sonic. Factors to be considered in this category include such things as accoustical requirements and sound system. Indicate any special considerations important to the planning of the foods laboratory area(s).

e. Safety. In planning school buildings, safety for pupils and teachers is of prime concern. Indicate any special considerations which have implications for design of the foods laboratory area(s).

7. Vertical instructional surfaces

a. Chalkboard	Yes No
1) Wall-mounted	P A NA
Number of lineal feet	___
2) Portable	P A NA
a) Number of lineal feet	___
b) Provision for storage	Yes No
b. Tackboard	P A NA
Number of lineal feet	___
c. Pegboard	P A NA
Number of lineal feet	___

8. Minimum floor areas required in square feet

a. Floor area in square feet for the entire foods laboratory area ___

b. If distinct space divisions are desired according to function, give minimum floor area requirements in square feet for each of the following areas if included in the desired program.
   1) Storage space
      a) Dry storage space ___

8

b) Refrigerated storage space __________
c) Freezer storage space __________
2) Vegetable and meat space __________
3) Baking space __________
4) Salad space __________
5) Sanitation or dish and pot washing space __________
6) Serving space __________
7) Laundry space __________
8) ______________________________________
9) ______________________________________

9. Other important factors to be considered in the planning of the foods laboratory area(s) are: __________________________
____
____
____
____
____
____
____
____
____

FORM J

DESCRIPTION OF CLOTHING LABORATORY AREA(S) TO BE USED PRINCIPALLY FOR ACTION LEARNING

1. The clothing laboratory area(s) should be planned:

a. As independent unit(s)	Yes	No
b. In combination with ______________ laboratory area(s) (specify)	Yes	No
c. In combination with seminar area(s)	Yes	No
d. In combination with lecture/demonstration area(s)	Yes	No
e. As an area within a single multi-purpose space	Yes	No

2. Student capacity required for scheduled activities (see Form E) ________

3. Student and teacher activities in various space divisions within the clothing laboratory area(s). Indicate the extent to which each activity will occur.

a. Laboratory space				
1) Learning to operate power sewing machines	1	2	3	N
2) Using, caring, and storing sewing equipment and accessories	1	2	3	N
3) Acquiring skill in constructing, designing and altering clothing and home furnishings	1	2	3	N
4) Training for management of work in the commercial sewing industry	1	2	3	N
5) Upholstering home furnishings	1	2	3	N
6) Pressing materials and garments	1	2	3	N
7) Using and caring for various textiles	1	2	3	N
8) Selecting household textiles	1	2	3	N
9) Caring and maintaining household textiles	1	2	3	N
10) Practicing good grooming habits	1	2	3	N
11) Practicing effective care in maintenance of clothing	1	2	3	N
12) Constructing and altering personal and family clothing	1	2	3	N
13) Exhibiting and evaluating clothing activities	1	2	3	N
14) ______________________________	1	2	3	N
15) ______________________________	1	2	3	N
b. Fitting area				
1) Trying on garments that have been constructed in the clothing laboratory	1	2	3	N
2) Practicing good grooming habits	1	2	3	N
3) Modeling various articles of apparel	1	2	3	N
4) Making necessary alterations of apparel	1	2	3	N
5) ______________________________	1	2	3	N
6) ______________________________	1	2	3	N

FORM J

c. Classroom space				
1) Acquiring knowledge of design and principles of art as related to commercial sewing and alterations	1	2	3	N
2) Learning the influence of textiles on the choice of construction methods and techniques of alterations	1	2	3	N
3) Exploring the world of work in the clothing field	1	2	3	N
4) Studying and testing fibers and fabrics	1	2	3	N
5) Learning and applying the principles of fashion and design	1	2	3	N
6) Selecting clothing and planning wardrobe needs	1	2	3	N
7) ____________________	1	2	3	N
8) ____________________	1	2	3	N
d. Other activities in the clothing laboratory area(s) or related areas				
1) ____________________	1	2	3	N
2) ____________________	1	2	3	N
3) ____________________	1	2	3	N
4) ____________________	1	2	3	N

4. Spatial relationships. Indicate the extent to which spaces should be accessible to each other.

a. Within the clothing laboratory area(s)				
1) Laboratory to:				
a) Fitting area	1	2	3	N
b) Classroom	1	2	3	N
2) Fitting area to:				
a) Classroom	1	2	3	N
b) Fitting area should be part of laboratory area and not a separate room	1	2	3	N
3) Other important special relationships within the clothing laboratory area(s).				
____________________				
____________________				
____________________				
____________________				
b. Clothing laboratory areas to:				
1) Instructional materials center	1	2	3	N
2) Building entrance	1	2	3	N
3) Delivery area	1	2	3	N
4) Other instructional areas	1	2	3	N
5) Other building areas (specify)				
a) ____________________	1	2	3	N
b) ____________________	1	2	3	N

5. Furniture and equipment

	Yes	No
a. Power sewing machine(s)		
1) Number required	________	

2) Electrical voltage required ___Volts
3) Further description ____________________

b. Button-hole machine(s) Yes No
1) Number required ________
2) Electrical voltage required ___Volts
3) Provision for storage required Yes No
4) Further description ____________________

c. Over-edging machines Yes No
1) Number required ________
2) Electrical voltage required ___Volts
3) Provision for storage required Yes No
4) Further description ____________________

d. Cutting table(s) Yes No
1) Number required ________
2) Metal tops P A NA
3) Wood tops P A NA
4) Provision for storage required Yes No
5) Portable Yes No
6) Further description ____________________

e. Ironing board(s) Yes No
1) Number required ________
2) Provision for storage Yes No
3) Further description ____________________

f. Power press Yes No
1) Number required ________
2) Provision for storage required Yes No
3) Further description ____________________

g. Steam Press (upright) Yes No
1) Number required ________
2) Further description ____________________

h. Full-size dress form Yes No
1) Number required ________

FORM J

2) Provision for storage Yes No
3) Further description ____________________
____
____
____

i. Half-scale form Yes No
1) Number required ______
2) Provision for storage Yes No
3) Further description ____________________
____
____
____

j. Teachers desk(s) Yes No
1) Number required ______
2) Provision for storage Yes No
3) Further description ____________________
____
____
____

k. File cabinets Yes No
1) Number of file drawers required ______
2) Legal size P A NA
3) Letter size P A NA
4) Further description ____________________
____
____
____

l. Student chairs Yes No
1) Number required ______
2) Folding-type P A NA
3) Provision for storage Yes No
4) Further description ____________________
____
____
____

m. Student tables Yes No
1) Number required ______
2) Folding-type P A NA
3) Provision for storage Yes No
4) Further description ____________________
____
____
____

n. Other major equipment needs for the clothing laboratory area(s). ____________________
____
____
____
____
____

6. Environmental factors
a. Aesthetic. Factors to be considered in the aesthetic domain

are color, light, style of architecture, design and the like. Indicate any special aesthetic considerations important to the planning of the clothing laboratory area(s).

b. Aerial. Factors to be considered in this category include air temperature, radiant temperature, relative humidity, and ventilation. Indicate any special considerations important to the planning of the clothing laboratory area(s).

c. Visual. A properly controlled and balanced visual environment is important. The visual environment affects such things as accuracy in perception, attention to tasks, and speed of performance. Indicate any special factors which should be taken into account in planning the visual environment of the clothing laboratory area(s).

d. Sonic. Factors to be considered in this category include such things as acoustical requirements and sound system. Indicate any special considerations important to the planning of the clothing laboratory area(s).

e. Safety. In planning school buildings, safety for pupils and teachers is of prime concern. Indicate any special safety considerations which have implications for design of the clothing laboratory area(s).

7. Vertical instructional surfaces

a. Chalkboard	
1) Wall-mounted	P A NA
a) Number of lineal feet	________
2) Portable	P A NA
a) Number of lineal feet	________
b) Provision for shortage	Yes No
b. Tackboard	P A NA
1) Number of lineal feet	________
c. Pegboard	P A NA
1) Number of lineal feet	________

FORM J

8. Minimum floor areas required in square feet

a. Floor area in square feet for the entire clothing laboratory area(s) ________

b. If distinct space divisions are desired according to function, give minimum floor area requirement in square feet for each of the following areas, if included in the desired program.

1) Laboratory space ________
2) Fitting room ________
3) Classroom ________
4) ______________ ________
5) ______________ ________

9. Other important factors to be considered in the planning of the clothing laboratory area(s) are:

____
____
____
____
____
____

FORM K

DESCRIPTION OF HOME FURNISHINGS LABORATORY AREA(S) TO BE USED PRINCIPALLY FOR ACTION LEARNING

1. The home furnishings, equipment, and services laboratory area(s) should be planned:

a.	As independent unit(s)	Yes	No
b.	In combination with ____________ (specify) laboratory area(s)	Yes	No
c.	In combination with lecture/demonstration area(s)	Yes	No
d.	In combination with seminar area(s)	Yes	No
e.	As an area within a single left-type space	Yes	No

2. Student capacity required for scheduled activities (see Form E) ________

3. Student and teacher activities within the home furnishings, equipment, and service laboratory area(s). Indicate the extent to which each activity will occur.

a.	Upholstering home furnishings	1	2	3	N
b.	Preparing surfaces for finishing	1	2	3	N
c.	Finishing surfaces	1	2	3	N
d.	Installing springs, webbing, etc.	1	2	3	N
e.	Planning and cutting material	1	2	3	N
f.	Removing finishes	1	2	3	N
g.	Preparing advertising displays	1	2	3	N
h.	Designing household interiors	1	2	3	N
i.	Architectural drawing	1	2	3	N
j.	____________				
k.	____________				
l.	____________				
m.	____________				
n.	____________				

4. Spatial relationships. Indicate the extent to which spaces should be accessible to each other. The home furnishings, equipment, and service laboratory area(s) to:

a.	Instructional material center	1	2	3	N
b.	Building entrance	1	2	3	N
c.	Delivery area	1	2	3	N
d.	Other building areas				
	1) ____________	1	2	3	N
	2) ____________	1	2	3	N
	3) ____________	1	2	3	N
e.	Other instructional areas				
	1) ____________	1	2	3	N
	2) ____________	1	2	3	N
	3) ____________	1	2	3	N

FORM K

5. Furniture and equipment

   a. Work bench — Yes No
      1) Lineal feet required ________
      2) Metal top — P A NA
      3) Wood top — P A NA
      4) Storage under — P A NA
      5) Further description ____________________
      ____
      ____

   b. Drying space — Yes No
      1) Fan for ventilation — Yes No
      2) Storage for finishes, etc. — Yes No
      3) Further description ____________________
      ____
      ____

   c. Tables for planning and cutting materials — Yes No
      1) Number required ________
      2) Work surface in sq. ft. ________
      3) Metal top — P A NA
      4) Wood top — P A NA
      5) Storage under — P A NA
      6) Further description ____________________
      ____
      ____

   d. Architectural drafting table(s) — Yes No
      1) Number required ________
      2) Special lighting above — P A NA
      3) Further description ____________________
      ____
      ____

   e. Other furniture and equipment for the home furnishings, equipment, and service laboratory area(s) are (give descriptions and quantities) ____________________
      ____
      ____
      ____
      ____
      ____
      ____

6. Environmental factors

   a. Aesthetic. Factors to be considered in the aesthetic domain are colors, light, style of architecture, design and the like. Indicate any special aesthetic considerations important to the planning of the home furnishings laboratory area(s). ____________________
      ____
      ____
      ____

   b. Aerial. Factors to be considered in this category include air temperature, radiant temperature, relative humidity,

FORM K

and ventilation. Indicate any special considerations important to the planning of the home furnishings laboratory area(s). ______________________________

____

____

____

c. Visual. A properly controlled and balanced visual environment is important. The visual environment affects such things as accuracy in perception, attention to tasks, and speed of performance. Indicate any special factors which should be taken into account and planning the visual environment of the home furnishings laboratory area(s).

____

____

____

____

d. Sonic. Factors to be considered in this category include such things as accoustical requirements and sound systems. Indicate any special considerations important to the planning of the home furnishings laboratory area(s).

____

____

____

____

e. Safety. In planning a school building, safety for pupils and teachers is of prime concern. Indicate any special safety considerations which have implications for design of the home furnishings laboratory area(s). ____________

____

____

____

7. Vertical instructional surfaces

a. Chalkboard	
1) Wall-mounted	P A NA
a) Number of lineal feet	________
2) Portable	P A NA
a) Number of lineal feet	________
b) Provision for storage	Yes No
b. Tackboard	P A NA
1) Number of lineal feet	________
c. Pegboard	P A NA
1) Number of lineal feet	________

8. Minimum space requirements in square feet for the home furnishings, equipment, and service laboratory area(s).

____

9. Other important factors to be considered in the planning of the home furnishings laboratory area(s) are: ______________

____

____

____

FORM L

DESCRIPTION OF INSTITUTIONAL AND HOME MANAGEMENT LABORATORY AREAS TO BE USED PRINCIPALLY FOR ACTION LEARNING

1. The institutional and home management laboratory area(s) should be planned:

    a. As an independent unit(s) Yes No
    b. In combination with ________________ (specify) laboratory area(s). Yes No
    c. In combination with seminar area(s) Yes No
    d. In combination with lecture/demonstration area(s) Yes No
    e. As an area within a single multi-purpose space Yes No

2. Student capacity required for scheduled activities (see Form E) ________

3. Student and teacher activities in various space divisions within the institutional and home management laboratory area(s). Indicate the extent to which each activity will occur.

    a. Home housekeeping space
        1) Acquiring skills and techniques of washing and ironing 1 2 3 N
        2) Understanding and caring for children 1 2 3 N
        3) Acquiring skills and techniques of cleaning 1 2 3 N
        4) ________________ 1 2 3 N
        5) ________________ 1 2 3 N
    b. Commercial housekeeping space
        1) Understanding and acquiring skills to handle equipment, such as dishwashers, vacuum cleaners, rug cleaners, floor waxers, and laundry equipment 1 2 3 N
        2) ________________ 1 2 3 N
        3) ________________ 1 2 3 N
    c. Textiles space
        1) Machine sewing 1 2 3 N
        2) Hand sewing 1 2 3 N
        3) ________________ 1 2 3 N
        4) ________________ 1 2 3 N
    d. Health service space
        1) Learning accident prevention 1 2 3 N
        2) Handling emergencies 1 2 3 N
        3) Caring for sick and elderly patients 1 2 3 N
        4) Acquiring desirable personal habits 1 2 3 N
        5) ________________ 1 2 3 N
        6) ________________ 1 2 3 N
    e. Kitchen space
        1) Preparing foods 1 2 3 N
        2) Planning meals 1 2 3 N

3) Purchasing foods 1 2 3 N
4) Storing foods 1 2 3 N
5) ______________________________ 1 2 3 N

f. Laundry space
1) Washing clothes, linen, etc. 1 2 3 N
2) Drying clothing, linen, etc. 1 2 3 N
3) ______________________________ 1 2 3 N
4) ______________________________ 1 2 3 N

g. Other activities in institutional and home management laboratory area(s)
1) ______________________________ 1 2 3 N
2) ______________________________ 1 2 3 N
3) ______________________________ 1 2 3 N
4) ______________________________ 1 2 3 N

4. Spatial relationships. Indicate the extent to which the spaces should be accessible to each other.

a. Classroom space to:
1) Home housekeeping 1 2 3 N
2) Commercial housekeeping 1 2 3 N
3) Textile space 1 2 3 N
4) Health service space 1 2 3 N
5) Bath 1 2 3 N
6) Kitchen space 1 2 3 N
7) Laundry space 1 2 3 N
8) Walk-in storage space 1 2 3 N

b. Home housekeeping space to:
1) Commercial housekeeping space 1 2 3 N
2) Textile space 1 2 3 N
3) Health service space 1 2 3 N
4) Bath 1 2 3 N
5) Kitchen space 1 2 3 N
6) Laundry space 1 2 3 N
7) Walk-in storage space 1 2 3 N

c. Commercial housekeeping space to:
1) Textile space 1 2 3 N
2) Health service space 1 2 3 N
3) Bath 1 2 3 N
4) Kitchen space 1 2 3 N
5) Laundry space 1 2 3 N
6) Walk-in storage space 1 2 3 N

d. Textile space to:
1) Health service space 1 2 3 N
2) Bath 1 2 3 N
3) Kitchen space 1 2 3 N
4) Laundry space 1 2 3 N
5) Walk-in storage space 1 2 3 N

e. Health service space
1) Bath 1 2 3 N
2) Kitchen space 1 2 3 N
3) Laundry space 1 2 3 N
4) Walk-in storage space 1 2 3 N

FORM L

f. Bath to:	
1) Kitchen space	1 2 3 N
2) Laundry space	1 2 3 N
3) Walk-in storage space	1 2 3 N
g. Kitchen to:	
1) Laundry space	1 2 3 N
2) Walk-in storage space	1 2 3 N
h. Laundry to:	
1) Walk-in storage space	1 2 3 N
i. Institutional and home management laboratory area(s) to:	
1) Instructional material center	1 2 3 N
2) Building entrance	1 2 3 N
3) Delivery area	1 2 3 N
4) Other instructional areas (specify)	
a) ______________________________	1 2 3 N
b) ______________________________	1 2 3 N
c) ______________________________	1 2 3 N
5) Other building areas (specify)	
a) ______________________________	1 2 3 N
b) ______________________________	1 2 3 N
c) ______________________________	1 2 3 N

5. Furniture and equipment

a. Portable demonstration table	Yes No
1) Number required	________
2) Further description	
______________________________	
______________________________	
______________________________	
b. Sinks with hot and cold running water	Yes No
1) Number required	________
2) Further description	
______________________________	
______________________________	
______________________________	
c. Sorting table(s)	Yes No
1) Number required	________
2) Provision for storage required	Yes No
3) Further description	
______________________________	
______________________________	
______________________________	
d. Student tables	Yes No
1) Number required	________
2) Folding type	Yes No
3) Provision for storage required	Yes No
4) Further description	
______________________________	
______________________________	
______________________________	

FORM L

e.	Student chairs	Yes No
	1) Number required	________
	2) Folding type	P A NA
	3) Provision for storage required	Yes No
	4) Further description	
	____	
	____	
	____	
f.	Bookshelves	Yes No
	1) Number of lineal feet required	________
	2) Open ____________ shelving	P A NA
	3) Closed shelving	P A NA
	4) Further description	
	____	
	____	
	____	
g.	Dining room and living room furnishings	Yes No
	1) Further description	
	____	
	____	
	____	
h.	Irons	Yes No
	1) Number required	________
	2) Provision for storage	Yes No
	3) Further description	
	____	
	____	
	____	
i.	Ironing boards	Yes No
	1) Number required	________
	2) Provision for storage	Yes No
	3) Further description	
	____	
	____	
	____	
j.	Sewing machines	Yes No
	1) Number required	________
	2) Electrical voltage required	____ Volts
	3) Provision for storage	Yes No
	4) Further description	
	____	
	____	
	____	
k.	Water-heater booster	Yes No
	1) Number required	________
	2) Further description	
	____	
	____	
	____	
l.	Roll-away bed with cover	Yes No
	1) Number required	________
	2) Provision for storage	Yes No

3) Further description

____
____
____

m. Privacy screens Yes No
1) Number required ______
2) Provision for storage Yes No
3) Further description

____
____
____

n. Hospital bed, hand-operated type, mattress included Yes No
1) Number required ______
2) Provision for storage Yes No
3) Further description

____
____
____

o. Hotel cleaning supply cart Yes No
1) Number required ______
2) Provision for storage Yes No
3) Further description

____
____
____

p. Refrigerator-freezer Yes No
1) Number required ______
2) Gas P A NA
3) Electric P A NA
4) Electrical voltage required ___Volts
5) Further description

____
____
____

q. Washing machine Yes No
1) Number required ______
2) Gas P A NA
3) Electric P A NA
4) Electric voltage required ___Volts
5) Further description

____
____
____

r. Dryer Yes No
1) Number required ______
2) Gas P A NA
3) Electric P A NA
4) Electrical voltage required ___Volts
5) Further description

____
____
____

FORM L

s. Dishwasher — Yes No
   1) Number required ____
   2) Electrical voltage required ___Volts
   3) Further description
   ____
   ____
   ____

t. Disposer — Yes No
   1) Number required ____
   2) Electrical voltage required ___Volts
   3) Further description
   ____
   ____
   ____

u. Range — Yes No
   1) Number required ____
   2) Gas — P A NA
   3) Electric — P A NA
   4) Electrical voltage required ___Volts
   5) Further description
   ____
   ____
   ____

v. Sweepers — Yes No
   1) Number required ____
   2) Further description
   ____
   ____
   ____

w. Scrubber and Polisher combination — Yes No
   1) Number required ____
   2) Further description
   ____
   ____
   ____

x. Carpet Shampooer — Yes No
   1) Number required ____
   2) Further description
   ____
   ____
   ____

y. Other equipment required for the institutional and home management laboratory area(s). Give description in quantities: ______________________
   ____
   ____
   ____

6. Environmental factors

   a. Aesthetic. Factors to be considered in the aesthetic are colors, light, style of architecture, design and the like. Indicate any special aesthetic considerations important

FORM L

to the institutional and home management laboratory area(s).
____
____
____
____

b. Aerial. Factors to be considered in this category include air temperature, radiant temperature, relative humidity, and ventilation. Indicate any special considerations important to the institutional and home management laboratory area(s). ____________________
____
____
____

c. Visual. A properly controlled and balanced visual environment is important. The visual environment affects such things as accuracy in perception, attention to tasks and speed of performance. Indicate any special factors which should be taken into account in planning the visual environment of the institutional and home management laboratory area(s). ____________________
____
____
____

d. Sonic. Factors to be considered in this category include such things as acoustical requirements and sound system. Indicate any special considerations important to the planning of the institutional and home management laboratory area(s). ____________________
____
____
____

e. Safety. In planning school buildings, safety for pupils and teachers is of prime concern. Indicate any special safety considerations which have implications for design of the institutional and home management area(s).
____
____
____
____

7. Vertical instructional surfaces

	Yes No
a. Chalkboard	
1) Number of lineal feet	________
2) Wall-mounted	P A NA
3) Portable	P A NA
4) Provision for storage	Yes No
b. Tackboard	P A NA
1) Number of lineal feet	________
c. Pegboard	P A NA
1) Number of lineal feet	________

FORM L

8. Minimum floor areas required in square feet (optional)

   a. Floor area in square feet for the entire institutional and home management laboratory area(s). __________

   b. If distinct space divisions are desired according to function, give minimum floor area requirements in square feet for each of the following areas if included in the desired program.
      1) Teaching space __________
      2) Home housekeeping space __________
      3) Commercial housekeeping space __________
      4) Textile space __________
      5) Health service space __________
      6) Bath __________
      7) Kitchen space __________
      8) Laundry space __________
      9) Walk-in storage space __________
      10) ______________________________ __________
      11) ______________________________ __________

9. Other important factors to be considered in the planning of the institutional and home management laboratory are:

____
____
____
____
____
____
____
____
____
____

FORM M

ADDITIONAL PLANNING CONSIDERATIONS

Other important factors to be considered in the overall planning and design of instructional areas for the planned home economics occupational preparation program(s) are:

1.

2.

3.

4.

5.

6.

7.

8.

PART IV

ANNOTATED BIBLIOGRAPHY

GENERAL FACILITY PLANNING

American Association of School Administrators. Planning America's School Buildings. Washington, D. C.: The Association, 1960.

Contributors to this publication were teachers, supervisors, administrators, architects, engineers, school board members, and school plant planning specialists. In addition to background material on school house construction, the book deals with specific topics including school surveys, analysis and computation of space and facility needs, enrollment projections, building designs, site selection, finance, and building maintenance and operation. Many pictures and illustrations are found, along with sample forms and outlines, which can be used in the facility planning process. No special consideration is given to unique problems faced in the planning for vocational and technical education facilities.

Boles, Harold W. Step by Step to Better School Facilities. New York: Holt, Rinehart, and Winston, 1965.

A textbook on overall planning procedures for new and improved school facilities. The typical topics (school surveys, building planning, site selection and acquisition, architectural planning, contracting for construction, and the equipping and furnishing of buildings) are covered. The only mention of vocational schools is on page 270 where the author quotes from another source:

> Vocational training should be de-emphasized in the schools since this training often becomes obsolete before it can be used; also, special "trade" and "vocational" schools should be discontinued, unless the vocational curriculum is liberal in approach and broad in character. Such schools are often used as dumping grounds for students who are not wanted elsewhere and often more than custodial care is provided for them. When more is provided, the skills taught are frequently too partial in nature.

Conrad, M. J. Four Steps to New Schools. Columbus, Ohio: Educational Administration and Facilities Division of the Bureau of Educational Research and Service, The Ohio State University.

A book prepared for the inexperienced school planner. The author emphasizes that a school building is an educational tool and should be designed to do the job they are intended to do. The four steps discussed are: 1) district-wide building survey, 2) educational planning, 3) architectural planning and construction, and 4) moving in and settling down. A glossary of important terms used in plant planning is located in the back of the book.

Conrad, M. J., Wohlers, E. E., and Griggs, Norman. School Plant Planning: An Annotated Bibliography. Columbus, Ohio: The Administration and Facilities Unit, School of Education, The Ohio State University, 1968.

A compilation of references in the following categories: general references; periodicals; overview of school plant field, district-wide building survey; educational planning; the architect and his work; moving in and settling down; and related topics.

Finchum, R. N. Extended Use of School Facilities. Washington, D. C.: U. S. Department of Health, Education, and Welfare, 1967.

This manual is intended to assist officials of school districts who are planning programs for maximum use of school properties and who must develop policies and regulations for efficient management of such programs. Various schedules of facility use are illustrated for nine different school systems.

Green, Alan C. Educational Facilities with New Media. Washington, D. C.: Department of Audiovisual Instruction, National Education Association, 1966.

This work is designed to meet the needs of three distinct groups interested in providing educational facilities. Report A: "A Guide for Policy Makers" is directed to boards, administrators, planning committees, and institutional planners. Report B: "A Guide for the Design of Professions" is designed for architects, planners, and design specialists and planning committees; and Report C: "A Technical Guide" is intended for design-architects, engineers, equipment and furniture suppliers, and media specialists.

National Council on School House Construction. NCSC Guide for Planning Plants. East Lansing, Michigan: The Council, 1964.

A basic reference on school plant planning and construction for use by superintendents, school board members, school plant planners, state department of education personnel, local school system officials, collegiate institutions, architects, lay advisory groups, and graduate students. Major topics covered are: planning and programming educational plants, spaces and equipment for learning, non-instructional systems, space organization, and economy and resources. Much attention is given to plant planning through a description of a survey technique used to determine and satisfy school plant needs for a community. Site selection, kinds of instructional space, sonic, termal, and visual environments, and best use of natural and plant resources are also treated.

North Carolina. Department of Public Instruction. A Digest of Educational Planning. Raleigh.

The contents of this book include a description of what educational planning is, when it is done, who does it, and how it is done. The three steps of planning are identified as (1) identification and analysis of educational and facility needs, (2) adapting and implementing plant improvement programs, and (3) completing and evaluating a process of the educational planning.

North Carolina. Department of Public Instruction, The Division of School Planning. School Design. Raleigh.

Basic principles of school design is the thrust of this publication. It focuses on the interrelationship of patterns of school activities, organization of activities on the site, design potentials for various sites, and the building design data necessary for communicating the school's needs to the architect.

School Planning Laboratory. Spectrum of Electronic Teaching Aids in Education. Stanford, California: Stanford University, 1965.

This publication seeks to suggest which learning functions can be served electronically, to symbolize the nature and progressive complexity of each electronic system, and finally to estimate budgets which will provide for adequate systems in relation to engineering and warranty costs.

Strevell, Wallace H., and Burke, Arvid J. Administration of the School Building Program. New York: McGraw-Hill Book Company, Inc., 1959.

A comprehensive textbook on the administration of the school plant program. The book is organized into three major parts: Part I--"Policy Decisions" deals with school building needs studies and long-range planning; Part II--"Program Recommendations" deals with local study of plant needs, evaluation of existing plant, determination of additional plant needs, site selection and development, and the preparation of educational specifications. Part III--"Project Administration" is concerned with the financial aspects of a building program and with public relations. There is a brief mention of the objectives of vocational education as contrasted with the objectives of general education on page 12.

The Cost of A Schoolhouse. New York: Educational Facilities Laboratories, 1960.

This book deals with the cost of a schoolhouse and the process of planning and financing it. It provides median costs for various building elements, designates individual responsibilities in process of building, and discusses arrangement of space and environmental factors.

VOCATIONAL-TECHNICAL FACILITY PLANNING

American Vocational Association. *Developing Educational Specifications for Vocational and Practical Arts Facilities*. Washington, D. C.: The Association.

The purpose of this publication is to reduce the broad principles and processes of school plant planning to those most applicable to vocational and practical arts education. Effective techniques for developing educational specifications are suggested. the committee provides a sequential treatment of program and administrative considerations, desired space and educational program, special site arrangement features, special physical aspects of building, and the financial requirements for the project.

Calder, Clarence R. *Modern Media for Vocational-Technical Education*. Connecticut: State Department of Education, 1967.

A study of related literature on programmed instruction, instructional films, instructional television, and learning from various instructional media. It analyzes new instructional media approaches used at North Carolina's Fundamental Learning Laboratories System, and the integrated experience approach at Oakland Community College.

Chase, William W., Browne, Johnny W., and Russo, Michael. *Basic Planning Guide for Vocational and Technical Education Facilities*. Washington, D. C.: Department of Health, Education, and Welfare, U. S. Government Printing Office, 1965.

A general guide that describes important steps to be followed in the planning for and construction of vocational and technical education facilities. Important topics covered are: the impact of the Vocational Education Act of 1963; surveys of area educational needs; use of consultant services; basic planning considerations; educational specifications; general planning; and school construction cost and outlay. Sample floor plans and picture illustrations of vocational schools are included.

McKee, Robert L. and Ripley, Katherine J. *The Documentation of Steps to Establish a Technical College and the Evaluation of PERT as a Planning Tool for Educators*. Bailey's Crossroads, Virginia: Unpublished report, 1966.

An account of the procedures followed in the establishment of a technical college within a period of less than 90 days. The entire planning process and implementation is described along with the PERT technique which was applied. The author concluded the PERT (Program Evaluation and Review Technique) was effective in assisting the planners in reaching their objectives within a short period of time.

Stanford University. *Trends in Facility Design: Vocational-Technical Continuing Information Program*. Stanford, California: School of Education, 1966.

The pamphlet emphasizes the need for a total flexibility concept in school building. Consideration is given to the use of building components to provide flexibility in space, lighting, air-conditioning, sewage system, and the like.

U. S. Department of Health, Education, and Welfare. *New Ideas and Construction for Vocational Education*. Washington, D. C.: Unpublished, 1967.

A report on new trends in the construction of vocational education facilities. Among topics covered are occupational clusters, teaching techniques such as micro-teaching and educational television, facilities for handicapped children, educational parks, and unique problems faced by large city school systems. Special consideration is given to maximum utilization of vocational education facilities on an around-the-clock basis.

Valentine, Ivan E. and Conrad, M. J. *Progress Report: Vocational-Technical Facilities Project*. Columbus, Ohio: The Center for Vocational and Technical Education, The Ohio State University, Mimeographed report, 1967.

A report which relates the thinking of six outstanding consultants on various topics relating current trends in vocational-technical education and facility planning. Reviews the work of a local consortium consisting of three Center vocational specialists, three school plant planners, three representatives from the State Department of Education, three local school officials, and three practicing architects in defining problems, clarifying issues, suggesting approaches to organizing planning guides, and establishing guidelines for a series of facility planning guides in selected vocational and technical subject areas.

Wohlers, A. E. *A Manual for Planning A Secondary School Building (Vocational Education)*. Columbus, Ohio: The Administration and Facilities Unit, School of Education, The Ohio State University, Pamphlet C-14

A general facility planning guide for programs of vocational education. Principal topics covered include: 1) number of teaching stations, 2) types of teaching stations, 3) equipment needs, and 4) floor areas required. The planning manual also deals with spatial relationships of teaching facilities and

the utilization of auxiliary areas such as libraries, cafeterias, and administrative suites. Planners using the guide are directed to complete checklists and fill-in blanks with the necessary information pertinent to vocational facility planning.

HOME ECONOMICS FACILITY PLANNING

American Home Economics Association. *Concepts and Generalizations: Their Place in High School Home Economics Curriculum Development*. Washington, D. C.: The Association, 1967.

This publication is a report of a "national effort to utilize concepts both as a means of defining the structure of home economics and as a basis for effective teaching." Important concepts and generalizations are given as well as their implications for the various aspects of home economics instruction. The major headings under which the concepts and generalizations appear: 1) *Human Development in the Family*; 2) *Home Management and Economics*; 3) *Foods and Nutritrition*; 4) *Textiles and Clothing*; 5) *Housing*.

Florida. State Department of Education, Division of Vocational and Adult Education. *Home Economics Education: Scope and Sequence Guide in Home Economics Education for Junior-Senior High School*. Tallahassee, August, 1961, (Bulletin 75F-5).

This publication is primarily a curriculum guide for home economics in the State of Florida. It consists, for the most part, of subject matter scope, sequence charts and recommended time allotments. The charts are preceded by background material concerned with societal changes and recent educational emphases in general and home economics education in particular.

Illinois Teacher of Home Economics. Volume VIII, No. 3, Urbana, Illinois: University of Illinois.

Within this publication are found some provocative ideas about curriculum and facilities. Included is a plan for integrating home economics into the general education program, a discussion on needed flexibility to meet new challenges in home economics education, and an analysis of the vocational purposes of home economics.

New Jersey. Department of Education. *Suggested List of Basic Equipment Requirements for Furniture, Machinery, Portable Equipment*. Trenton, New Jersey, 1966.

An itemized list of equipment requirements for the vocational service areas of trade, and industry, distributive education, office occupations, health occupations, home economics, and agriculture.

Ohio. Department of Education. Division of Vocational Home Economics. Guide for Planning the Home Economics Department. Columbus, 1964.

This guide provides a comprehensive analysis of facility planning for a high school vocational home economics program covering such topics as 1) principles in planning space and facilities, 2) planning the home economics department, 3) location and arrangement of spaces, 4) general features of activities or work centers, 5) storage, 6) equipment and furniture, and 7) a discussion of requirements in the areas of atmosphere, lighting, floors, counter surfaces, wiring, a and small equipment.

Ohio. Department of Education. Division of Vocational Education. Suggested Space and Equipment Costs for Job Training Programs. Columbus, 1967.

A bulletin prepared to assist school administrators, architects, teachers, and others plan and develop programs in high schools and joint vocatioaal schools. According to the authors, the facilities "suggested" are adequate for programs for high school youth, and adults for employment in occupations utilizing home economics knowledge and skills. Space requirements in square feet, needed equipment, approximate equipment costs and sample floor plans are offered. A bibliography of materials which may be useful to planners of vocational home economics facilities is found in this publication.

Taylor, James L. and Christian, Johnie. Planning Functional Facilities for Home Economics Education. Washington, D. C.: Department of Health, Education, and Welfare, U. S. Government Printing Office, 1965.

This publication is concerned with educational trends and concepts which affect home economics, current developments in the home economics curriculum and their implications for space and facilities. It contains sections on how to plan the specific needs for each curriculum area; specialized furniture and equipment requirements and the general physical environmental considerations.

Washington. Department of Education, Division of Vocational Education. Space and Equipment Recommendations for Home and Family Life Education Program: Secondary and Post-Secondary Levels. Olympia, 1967.

This bulletin is designed to give assistance to school administrators, architects, and home and family life teachers as they plan renovations of existing facilities and construction of new home economics facilities, in secondary and post-secondary programs. Check sheets for planning, suggestions for writing educational specifications, and a work sheet for evaluating preliminary designs are included.

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